



TECHNICAL EDUCATION ECOSYSTEM REPORT

for DeKalb, LaGrange, Noble, and Steuben Counties

PREPARED BY TPMA | OCTOBER 2023



DON WOOD
FOUNDATION

About the Don Wood Foundation



The Don Wood Foundation is a private foundation, established in 2018 by Don Wood, founder of 80/20, Inc., that serves and supports innovators, leaders, collaborators, and skilled workers with the potential to create and sustain opportunities in manufacturing. The Foundation partners with non-profits and educational institutions to provide sustained investment that supports the development of a diverse workforce through exposure, education, and training to create strong communities rooted in the advancement of manufacturing. Visit www.donwoodfoundation.org and follow Don Wood Foundation on LinkedIn and Facebook.

About TPMA



TPMA empowers organizations and communities through strategic partnerships and informed solutions that create positive, sustainable change. For community champions who are loyal to improving local and regional economic outcomes, TPMA provides professional consulting services and delivers transparent insights to the complete workforce, education, and economic development ecosystem that allows them to move forward, together. TPMA envisions a world that thinks strategically, works collaboratively, and acts sustainably. Visit www.tpma-inc.com and follow TPMA on LinkedIn, Facebook, and Twitter.

Table of Contents

4 | Executive Summary

CTE FUNDING DESIGNATIONS FOR HIGH SCHOOLS
DISCREPANCY AMONG LOW INCOME STUDENTS
ALIGNMENT OF CTE PROGRAMS OF STUDY WITH INDUSTRY NEEDS
CREDENTIALS OF VALUE EARNED BY CTE STUDENT
ADVANCED MANUFACTURING PATHWAY
OVERVIEW OF REGION-WIDE RECOMMENDATIONS

6 | Matrix of Technical Education

NEXT LEVEL PROGRAMS OF STUDY
CTE FUNDING DESIGNATIONS FOR HIGH SCHOOLS
CREDENTIALS OF VALUE
INTERNS DATA

8 | Baseline Data

CTE OFFERINGS IN THE 4-COUNTY REGION
CTE STUDENT DEMOGRAPHICS

12 | Credentials of Value

13 | Alignment to Labor Market Demand

DEKALB COUNTY
LAGRANGE COUNTY
NOBLE COUNTY
STEBEN COUNTY
IMPACT INSTITUTE AND REGIONAL ALIGNMENT

28 | Recommendations

DEKALB COUNTY
LAGRANGE COUNTY
NOBLE COUNTY
STEBEN COUNTY
REGION-WIDE RECOMMENDATIONS

This document was created primarily for digital viewing. Click a Table of Contents item to navigate to the corresponding location. Click the header title or page number on any page to return to the Table of Contents.

Technical Education Ecosystem Report

for DeKalb, LaGrange, Noble, and Steuben Counties

This report presents the findings of a comprehensive research study conducted by TPMA in partnership with the Don Wood Foundation. The study focused on the Career and Technical Education (CTE) ecosystem in DeKalb, LaGrange, Noble, and Steuben counties. The objective of the study was to bridge the gap between students and workforce opportunities, particularly in the manufacturing industry, which is the dominant industry in these counties.

The study examined various aspects of the CTE ecosystem, including CTE offerings, student demographics, credentials of value, and alignment to labor market demand. The findings provide a clear picture of the current state of the CTE ecosystem in these counties and offer insights into the challenges and opportunities that exist. Below is an overview of the key findings during the analysis of the current CTE ecosystem in the 4-county region.

- 01. CTE FUNDING DESIGNATIONS FOR HIGH SCHOOLS:** CTE funding for high schools in Indiana is categorized into three levels of value: high, moderate, and less than moderate. These designations are based on the demand and wage potential of occupations associated with CTE courses at the state level. However, these designations may not align with the actual labor market demand in DeKalb, LaGrange, Noble, and Steuben counties. Despite potential misalignment, these value designations determine the amount of CTE funding allocated to schools in these counties, which may influence the courses offered by these schools.
- 02. DISCREPANCY AMONG LOW INCOME STUDENTS:** The demographics of CTE students in the region reveal a significant discrepancy when it comes to economic status. While 40% of the total high school student population in the 4-county region is experiencing poverty, as indicated by their qualification for free and reduced lunch status, only 8.4% of students enrolled in CTE programs of study fall into the same category. This potential contrast suggests a possible disconnect between the economic realities of the broader student population and the demographic makeup of CTE participants. This disparity raises important questions about access to and awareness of CTE programs among students living in poverty. It underscores the need for targeted strategies to ensure that these high-value educational opportunities are not only available but also accessible to students from lower-income backgrounds. By addressing this disconnect, CTE programs can play a crucial role in providing pathways to economic stability and upward mobility for a greater proportion of students in the region.
- 03. ALIGNMENT OF CTE PROGRAMS OF STUDY WITH INDUSTRY NEEDS:** The alignment of CTE programs with the top industries in the region is a critical factor in ensuring the relevance and effectiveness of these programs. In the 4-county region, 41% of CTE students are enrolled in programs of study that align with the top industry needs of their county and/or the region. This alignment is crucial in preparing students for high-demand, high-wage jobs and ensuring that the skills they acquire are directly applicable in the local job market. However, the report points out certain inconsistencies. While some pathways align with the county's leading industries, there were cases where students didn't obtain a credential of value (an industry-recognized credential, technical certificate from Ivy Tech Community College or Vincennes University, or college credits). Several reasons might explain this. For one, there might not be an industry-approved credential that qualifies for Graduation Pathways and matches the content of those CTE courses. Alternatively, some schools might lack a qualified instructor to offer dual credits. Given the Indiana Department of Education's emphasis on credentials of value for graduates, it is crucial for high schools to determine why students aren't earning these credentials and explore potential solutions.
- 04. CREDENTIALS OF VALUE EARNED BY CTE STUDENTS:** The report provides a detailed analysis of the number and percentage of CTE students who earned a "credential of value" during their CTE class in the 2023-2024 school year across four counties in Indiana and the Impact Institute. A "credential of value" is defined as college credits, a technical certification through Ivy Tech Community College or Vincennes University, or an industry-recognized credential. Across the entire region, out of 5,839 CTE students, 40.7% earned a credential of value. However, most of the credentials of value earned (59.9%) were in Less than Moderate Value programs of study, followed by High Value CTE (38.8%), and Moderate Value CTE (36.8%). The Less than Moderate Value credentials include college credits and industry-recognized certifications in digital design, nutrition, and hospitality. Please note that students may obtain multiple valuable credentials and enroll in several courses within a school year. As a result, they might be counted multiple times in this data. For further details, refer to page 13 of the report.
- 05. ADVANCED MANUFACTURING PATHWAY:** In the Advanced Manufacturing pathway, which aligns with the region's top industry, there were 251 students, and a high percentage of them (84.9%) earned a credential of value. This suggests that this pathway is effectively preparing students for careers in the manufacturing industry. The Industry 4.0 - Smart Manufacturing pathway had fewer students (36), and a lower percentage of them (25.0%) earned a credential of value. This could indicate a need for improvement in this pathway.

The report also provides recommendations for each county and the region. These recommendations are aimed at enhancing the effectiveness of the CTE ecosystem and ensuring that it meets the needs of both students and employers. The recommendations include enhancing the relevance of CTE offerings, improving alignment with labor market demand, and increasing awareness of the rewarding, high-wage, high-skill career opportunities that exist in the region.

Overview of Region-wide Recommendations:

Collaborate region-wide to develop high-quality work-based learning opportunities for high school students.

The report suggests maintaining and expanding the collaborative approach to work-based learning (WBL) opportunities, which has demonstrated great success in Northeast Indiana. The effectiveness of initiatives like the Baron Advanced Manufacturing (BAM) program, facilitated by the Purdue IN-MAC program, highlights the potential of such collaborative efforts.

Address access gaps within the four counties by developing remote work-based learning opportunities.

Expanding access to work-based learning (WBL) opportunities is crucial for fostering the technical ecosystem in the four counties. However, it is essential to acknowledge that not all students have equal access to these traditional WBL options. Students in rural communities, for instance, face limited opportunities due to a scarcity of local employers and intense competition for region-specific industries. To address this gap, it is highly recommended that the four counties work with employers to develop remote WBL opportunities to allow greater access among their high school students.

Develop a region-wide process for allowing students to utilize Career Scholarship Accounts (CSAs) to pay for career coaching and navigation services, postsecondary education and training, transportation and equipment, and certification and credentialing examinations.

With House Enrolled Act (HEA) 1002-2023, Indiana established career scholarship accounts to help 10th through 12th grade students who are enrolled in eligible programs pay for career coaching and navigation services, postsecondary education and training, transportation and equipment, and certification and credentialing examinations. HEA 1002-2023 also provides for grants to bolster intermediary capacity in communities. With the availability of this new opportunity, it is highly recommended that qualifying organizations in the 4-county region apply to become CSA intermediaries and develop a process for educating employers, schools, students, and parents/guardians on their CSA options, and utilize this additional funding to bring more students into the already robust technical education ecosystem. It should be noted, however, that CSAs are funded through the same funding stream as the Form 30A reimbursement funding schools receive for their CTE courses, and that the use of a CSA could potentially impact the state funding received by the student's high school.

Provide a skill-based approach to career advising to high school students:

Develop and adopt a nonlinear, "transferable skill" or reskilling approach to career advising and employer engagement to help students understand the versatile skill set they developed in their CTE classes (no matter the pathways) that can be applied across various industries, enhancing their employability in high-demand careers and helping build a sustainable talent pipeline for the region.

Address generational gaps by consistently and intentionally including high school students in community- and region-based conversations around technical education and workforce development.

The generational gap between educators, employers, and students can often lead to misunderstandings and missed opportunities. To bridge this gap, it is recommended that community and workforce leaders in the 4-county region involve high school students in the conversations and decisions surrounding technical education and workforce development.

Develop common definitions of technical education terminology.

Working as a region, identify and develop a glossary of terms and definitions related to CTE, which can be shared among schools, employers, and community organizations. This will ensure that everyone is synchronized and that there is a common understanding of what different terms and concepts mean.

Develop common CTE curriculum maps and pacing guides so programs do not leave with an instructor.

Develop curriculum resources that can be used by any teacher, not just the one who originally developed the course. These resources could include lesson plans, pacing guides, and assessment tools, all aligned with industry standards and requirements.

The Don Wood Foundation is committed to supporting the advancement of manufacturing, entrepreneurship, sales, and leadership-related education in the region. By understanding the current state of the CTE ecosystem and the challenges and opportunities that exist, the Foundation can make informed decisions about where to allocate resources to have the greatest impact.

This study provides a comprehensive overview of the CTE ecosystem in DeKalb, LaGrange, Noble, and Steuben counties. It highlights the importance of career and technical education in bridging the gap between students and workforce opportunities and provides actionable recommendations for enhancing the effectiveness of the CTE ecosystem. Finally, we believe that the findings of this study should be instrumental in guiding other regional stakeholder strategies for related funding allocation and supporting the advancement of career education and training in the region.



Matrix of Technical Education

The technical education ecosystem in DeKalb, LaGrange, Noble, and Steuben counties in northeast Indiana is a dynamic and multifaceted landscape influenced by various factors, such as state-wide initiatives, funding structures, credentialing systems, and data reporting mechanisms. A comprehensive understanding of these elements is vital for interpreting the data related to technical education in these counties and for making informed decisions regarding program development, resource allocation, and policy implementation.

The following sections of this report provide an overview of the CTE offerings in this four-county region, along with an assessment of how these offerings align with statewide labor market demand, students with documented disabilities and students living below the federal poverty level who are participating in the technical education ecosystem, and students earning credentials of value prior to high school graduation. Furthermore, it explores the alignment of this ecosystem with the top industries in each county. To understand the data sources and analysis methods, key definitions and explanations of the factors influencing this data are provided.



NEXT LEVEL PROGRAMS OF STUDY:

One significant component of the technical education ecosystem in Indiana is the Next Level Programs of Study (NLPS). Launched by Indiana's Office of Career and Technical Education (CTE) in the 2022-2023 school year, NLPS aims to enhance the consistency, quality, and intentional instruction of CTE throughout the state.¹ NLPS encompasses a range of courses and pathways, known as CTE concentrators, designed to equip students with the skills and competencies necessary for success in various career fields. These programs of study undergo vetting by education and industry leaders to ensure alignment and quality, and they must offer students an opportunity to earn a credential of value. For a program of study to qualify as the CTE concentrator requirement for Indiana's Graduation Pathways (the graduation requirements for high school students in Indiana), a student must complete at least three courses within the same program of study: a principles course, a concentrator A course, and a concentrator B course.² While not mandatory for graduation, participation in a high-quality work-based learning (WBL) experience at the conclusion of the program is strongly encouraged as it provides students with a chance to apply their skills and knowledge in real-world situations.

CTE FUNDING DESIGNATIONS FOR HIGH SCHOOLS:

CTE funding for high schools in Indiana is categorized into three levels of value: high, moderate, and less than moderate. This funding is known as Form 30A reimbursement funding. These designations are based on the demand and wage potential of occupations associated with CTE courses at the state level.³ However, it should be noted that these designations may not align with the actual labor market demand in DeKalb, LaGrange, Noble, and Steuben counties. Despite potential misalignment, these value designations determine the amount of CTE funding allocated to schools in these counties, which may influence the courses offered by these schools.

CREDENTIALS OF VALUE:

In the context of high school CTE students, "credentials of value" refer to nondegree credentials that validate job-relevant skills.⁴ These credentials, including college credits, technical certificates from Indiana colleges, and industry-recognized certifications, are increasingly significant in the technical education landscape because they provide students with a means to acquire and demonstrate competencies directly applicable to the labor market. Currently, there is a heightened emphasis on the importance of credentials of value for Indiana's high school students, with the Indiana Department of Education recognizing the increased access to high-value postsecondary credentials, and the number of students earning these credentials as a key area of focus in their comprehensive approach to rethinking the high school experience.⁵

INTERS DATA:

The Indiana Technical Education Reporting System (InTERS) serves as the platform for collecting and managing data related to CTE, which is subsequently reported to Vocational and Technical Education for the Federal Report.⁶ This system plays a pivotal role in tracking student progress, evaluating program effectiveness, and ensuring compliance with federal reporting requirements. School districts across the state are required to upload their CTE data into InTERS annually through the completion of Form 30A, which is document of record stating the number of students enrolled in each CTE course and the associated number of credits.⁷ The majority of the CTE data presented in this report was directly sourced from the InTERS system for the 2022-2023 school year, providing an up-to-date and accurate depiction of the technical education ecosystem in DeKalb, LaGrange, Noble, and Steuben counties.

1 Governor's Workforce Cabinet. Career Pathways / Programs of Study. <https://www.in.gov/gwc/cte/career-pathways-programs-of-study/>

2 Office of Career and Technical Education. Next Level Programs of Study (NLPS) Overview. https://www.in.gov/gwc/cte/files/NLPS-Review-Doc-w-Competencies_21-22-SY.pdf

3 Indiana Department of Workforce Development. SY 22/23 Career & Technical Education Program Categorizations and Funding Recommendations. <https://www.in.gov/sboe/files/Changes-to-the-2022-23-CTE-Funding-Memo-Recommendations.pdf>

4 National Conference of State Legislators. Credentials of Value. <https://www.ncsl.org/education/credentials-of-value>

5 Indiana Department of Education. Indiana Department of Education Outlines Plan to Rethink the High School Experience. <https://www.in.gov/doe/about/news/indiana-department-of-education-outlines-plan-to-rethink-the-high-school-experience/>

6 Governor's Workforce Cabinet. InTERS/Performance and Accountability. <https://www.in.gov/gwc/cte/intersperformance-and-accountability/>

7 Central Indiana Corporate Partnership. Career and Technical Education in the State of Indiana. <https://www.in.gov/gwc/files/CTE-in-the-State-of-Indiana-Final.pdf>

Baseline Data

The chart below displays the total number of students from DeKalb, LaGrange, Noble, and Steuben counties⁸ who took CTE courses at their respective high schools in the 2022-2023 school year, based on the June 2023 InTERS Form 30A report. Keep in mind that if students took multiple CTE courses during the 2022-2023 school year, they would appear several times in this data. This is why some schools, like Garrett High School, show an enrollment rate exceeding 100% for CTE courses.

High schools in DeKalb, LaGrange, Noble, and Steuben counties can also send their students to the Impact Institute for CTE classes. Out of the 7,853 students in these counties, 1,272 (or 16% of the region total) chose to take CTE classes at the Impact Institute rather than at their home school

	TOTAL # OF HIGH SCHOOL STUDENTS	# OF STUDENTS IN CTE AT THEIR HOME HIGH SCHOOL	% OF STUDENTS IN CTE IN THEIR HOME HIGH SCHOOL
Region Total	7853	6056	77%
Angola High School	785	371	47%
Central Noble Junior Senior HS	654	242	37%
DeKalb High School	1075	879	82%
East Noble High School	1055	796	75%
Eastside Junior-Senior High School	585	289	49%
Fremont High School	292	68	23%
Garrett High School	572	930	163%
Hamilton Community High School	186	45	24%
Lakeland Jr/Sr High School	793	724	91%
Prairie Heights Sr High School	416	479	115%
West Noble High School	697	845	121%
Westview Jr-Sr High School	743	388	52%

CTE Offerings in the 4-County Region

The following data from InTERS represents the distribution of students across different CTE programs of study in DeKalb, LaGrange, Noble, and Steuben counties in Indiana and the Impact Institute, a vocational cooperative that serves students from those four counties. The courses included in this data were only ones that qualified for CTE funding at the High Value, Moderate Value, or Less than Moderate Value funding designations and therefore do not include introductory, career exploration, pilot, or work-based learning (WBL) courses.

These pathways are categorized into three value levels: High, Moderate, and Less than Moderate. The value levels are determined based on the demand and wage potential of jobs in the corresponding industries at a state level. High Value pathways prepare students for high-demand, high-wage jobs, while Less than Moderate Value pathways correspond to industries with lower demand or wage potential. Importantly, the value level also influences the funding that schools receive for these courses, with more funding allocated to High Value pathways.

Below is a more detailed explanation of how these designations are determined:

The Indiana Department of Workforce Development (DWD) used the IN Demand Ranking methodology to evaluate demand and wage for occupations associated with CTE courses per IC 20-43-8.⁹ Each occupation was evaluated on a decile scoring system across five variables, which was then summarized to equate to an overall value (known as a Flame Threshold¹⁰) of between 1 and 5.2 This was the same methodology that was used and adopted by the SBOE for SY18/19 CTE course designations.

IN Demand Ranking scores (Flame Threshold) of each occupation were summed and averaged to equate to an overall CTE course score known as a Flame Funding Level. Less than moderate value CTE courses scored within a 0.00-2.99 threshold. Moderate value CTE courses scored within a 3.00-3.49 threshold, and high value CTE courses scored between 3.5 and 5.00.¹⁰

The following chart (right) shows how the Flame Funding Level (CTE course score) of a CTE course corresponds to the Flame Threshold (IN Demand Ranking score).

While these value designations align to the labor market demand of the state of Indiana and not that of the 4-counties, the school districts in each county choose which programs in each designation to offer to their students. Therefore, these value designations still show an accurate picture of the technical education system in this region.

FLAME FUNDING LEVELS WITH FLAMES THRESHOLD		
Course Designation	Flame Threshold	Reimbursement Rate (per Credit, Max of 3)
Less than Moderate Value	0.00-2.99	\$200
Moderate Value	3.00-3.49	\$400
High Value	3.50-5.00	\$680

Across the entire region, out of 5,839 CTE students, 47.6% are in High Value pathways, 39.9% are in Moderate Value pathways, and 12.6% are in Less than Moderate Value pathways. This indicates that nearly half of the students are being prepared for high-demand, high-wage jobs, which is a positive trend for the region's future workforce. However, there are over 700 students in this region who are taking courses that do not lead to high-demand, high-wage jobs. These courses are in programs of study such as Digital Design, Radio & TV, and Horticulture.

Steuben County, despite having the smallest number of CTE students (237), has the highest proportion of students in High Value pathways (58.6%) and no students in Less than Moderate Value pathways. The Impact Institute, with 1,298 CTE students from all four counties, has a lower proportion of students in High Value pathways (40.4%) compared to the counties. Notably, it also has a significantly higher proportion of students in Less than Moderate Value pathways (27.3%).

COUNTY	STUDENTS IN HIGH VALUE CTE COURSES	STUDENTS IN MODERATE VALUE CTE COURSES	STUDENTS IN LESS THAN MODERATE VALUE CTE COURSES	TOTAL # OF CTE STUDENTS
Region Totals	47.6% (2778)	39.9% (2327)	12.6% (734)	5839
Dekalb County	50.3% (911)	39.7% (719)	9.9% (180)	1810
LaGrange County	50.0% (572)	37.9% (434)	12.1% (138)	1144
Noble Country	46.7% (631)	48.7% (658)	4.5% (61)	1350
Steuben County	58.6% (139)	41.4% (98)	0.0% (0)	237
Impact Institute	40.4% (525)	32.2% (418)	27.3% (355)	1298

9 Governor's Workforce Council. IN Demand Ranking Methodology. <https://www.in.gov/gwc/files/IN-Demand-Ranking-Methodology.pdf>

10 Indiana Department of Workforce Development. SY 22/23 Career & Technical Education Program Categorizations and Funding Recommendations. <https://www.in.gov/sboe/files/Changes-to-the-2022-23-CTE-Funding-Memo-Recommendations.pdf>

CTE Student Demographics

The following data represents the demographic breakdown of students with documented disabilities and students living below the federal poverty level that were enrolled in Career and Technical Education (CTE) programs of study in the 2022-2023 school year in DeKalb, LaGrange, Noble, and Steuben counties in Indiana and the Impact Institute.¹¹ This data came from InTERS and only includes courses that qualified for CTE funding at the High Value, Moderate Value, or Less than Moderate Value funding designations and therefore do not include introductory, career exploration, pilot, or work-based learning (WBL) courses. It is also important to note that there are likely students that are represented by both categories (e.g., a student with a documented disability who is also living below the federal poverty level), but the InTERS data available publicly does not provide a way to determine these duplications. The overall demographic averages for each high school came from an Indiana Department of Education report titled "School Enrollment by Special Education and English Language Learners (Updated SY 2022-2023)"¹²

Across the region, 15.6% of CTE students have a documented disability, and 8.4% are living below the federal poverty line. With 16.4% of students in the 4-county regional high schools having a documented disability, this is an equitable and expected ratio. It also highlights the importance of providing support and resources for these students to ensure they can succeed in their CTE courses and move on to high-demand, high-wage jobs.

	REGION TOTALS				
	Student Total	Students with a Documented Disability		Students Living Below Federal Poverty Line	
		Number	Percent	Number	Percent
High Value CTE	2778	365	13.1%	236	8.5%
Moderate Value CTE	734	123	16.8%	71	9.7%
Less than Moderate Value CTE	2327	420	18.0%	183	7.9%
Student Total	5839	908	15.6%	490	8.4%

Only 1.4% of CTE students in DeKalb County are living below the federal poverty line, which is significantly below the regional average of 8.4%. With 37% of DeKalb County high school students receiving free or reduced lunch (which is based on family income levels), it appears that lower income students are not being enrolled at the same ratio as their peers within the county and the region.¹³

	DEKALB COUNTY				
	Student Total	Students with a Documented Disability		Students Living Below Federal Poverty Line	
		Number	Percent	Number	Percent
High Value CTE	911	110	12.1%	8	0.9%
Moderate Value CTE	180	24	13.3%	4	2.2%
Less than Moderate Value CTE	719	106	14.7%	14	1.9%
Student Total	1810	240	13.26%	26	1.4%

LaGrange County, with 1,144 CTE students, has a slightly below-average percentage of students with documented disability (14.9%). However, a striking 26.2% of CTE students in LaGrange County are living below the federal poverty line, which is more than three times the regional average. This suggests a high level of economic hardship among CTE students in LaGrange County. It's possible that these students are turning to CTE courses as a pathway to more stable, high-paying jobs.

	LAGRANGE COUNTY				
	Student Total	Students with a Documented Disability		Students Living Below Federal Poverty Line	
		Number	Percent	Number	Percent
High Value CTE	572	75	13.1%	176	30.8%
Moderate Value CTE	138	26	18.8%	8	5.8%
Less than Moderate Value CTE	434	70	16.1%	116	26.7%
Student Total	1144	171	14.9%	300	26.2%

11 U.S. Department of Health and Human Services. HHS Poverty Guidelines for 2023. <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines>

12 Indiana Department of Education. <https://www.in.gov/doe/files/school-enrollment-ell-special-education-2006-23.xlsx>

13 Indiana Department of Education. <https://www.in.gov/doe/files/school-enrollment-ethnicity-and-free-reduced-price-meal-status-2006-23.xlsx>

Noble County and the Impact Institute both have above-average percentages of students with a documented disability (17.6%). This could suggest a higher prevalence of disabilities in these areas or a greater effectiveness in accommodating students with disabilities in CTE courses. However, the percentage of students living below the federal poverty line is below average in Noble County (4.3%), especially considering 47% of high school students in Noble County qualify for free and reduced lunch.

Steuben County, despite having the smallest number of CTE students (237), has a similar percentage of students with a documented disability (13.5%) to DeKalb County. However, only 0.4% of CTE students in Steuben County are living below the federal poverty line, the lowest of any count, even though 40% of Steuben County high school students qualify for free and reduced lunch.

	NOBLE COUNTY				
	Student Total	Students with a Documented Disability		Students Living Below Federal Poverty Line	
		Number	Percent	Number	Percent
High Value CTE	631	104	16.5%	19	3.0%
Moderate Value CTE	61	16	26.2%	2	3.3%
Less than Moderate Value CTE	658	117	17.8%	37	5.6%
Student Total	1350	237	17.6%	58	4.3%

	IMPACT INSTITUTE				
	Student Total	Students with a Documented Disability		Students Living Below Federal Poverty Line	
		Number	Percent	Number	Percent
High Value CTE	525	64	12.2%	33	6.3%
Moderate Value CTE	355	57	16.1%	57	16.1%
Less than Moderate Value CTE	418	107	25.6%	15	3.6%
Student Total	1298	228	17.6%	105	8.1%

	STEBEN COUNTY				
	Student Total	Students with a Documented Disability		Students Living Below Federal Poverty Line	
		Number	Percent	Number	Percent
High Value CTE	139	12	8.6%	0	0
Moderate Value CTE	0	0	0.0%	0	0
Less than Moderate Value CTE	98	20	20.4%	1	1.0%
Student Total	237	32	13.5%	1	0.4%

While this demographic data shows that students with documented disabilities are proportionally enrolled in CTE programs of study compared to their peers, students living below the federal poverty wage appear to be significantly less likely to be enrolled in these programs. Several factors are likely influencing this imbalance, such as the likelihood that students below the poverty line struggle academically more often than their peer and therefore may be less likely to have room in their academic schedules for CTE courses due to academic remediation classes or having to retake academic core classes.¹⁴ Another potential cause for this imbalance could be barriers to access to CTE courses due to lack of personal transportation. It is important to note, however, that based on the stakeholder data collected during this study, cost of participation (e.g., tuition, materials, etc.) does not seem to be a barrier for any student because most if not all of these costs are covered by the student's school.

14 American Psychological Association. "Education and Socioeconomic Status." Retrieved from <https://www.apa.org/pi/ses/resources/publications/education>

Credentials of Value

This section analyzes the number and percentage of Career and Technical Education (CTE) students who earned a “credential of value” during their CTE class in the 2023-2024 school year across four counties in Indiana and the Impact Institute. A “credential of value” is defined as college credits, a technical certification through Ivy Tech Community College or Vincennes University, or an industry-recognized credential. It is important to note that all Next Level Programs of Study (NLPS) courses must provide students with the option of earning at least one credential of value, but students are not required to earn that credential for the class to count as a CTE concentrator for the Graduation Pathways.

HIGH VALUE CTE COURSES			MODERATE VALUE CTE COURSES			LESS THAN MODERATE VALUE CTE COURSES		
Location	Student Total	Students Earning a Credential of Value	Location	Student Total	Students Earning a Credential of Value	Location	Student Total	Students Earning a Credential of Value
Region Total	2778	38.8% (1077)	Region Total	2778	36.8% (857)	Region Total	734	59.9% (440)
DeKalb County	911	60.3% (549)	DeKalb County	719	24.9% (179)	DeKalb County	180	60.6% (109)
LaGrange County	572	13.3% (76)	LaGrange County	434	39.2% (170)	LaGrange County	138	52.9% (73)
Noble County	631	7.3% (46)	Noble County	658	26.3% (173)	Noble County	61	32.8% (20)
Steuben County	139	0.0% (0)	Steuben County	98	11.2% (11)	Steuben County	0	0.0% (0)
Impact Institute	525	77.3% (406)	Impact Institute	418	77.5% (324)	Impact Institute	355	67.0% (238)

Across the entire region, out of 5,839 CTE students, 40.7% earned a credential of value. However, most of the credentials of value earned (59.9%) were in Less than Moderate Value programs of study, followed by High Value CTE (38.8%), and Moderate Value CTE (36.8%). The Less than Moderate Value credentials include college credits and industry-recognized certifications in digital design, nutrition, and hospitality.

In **DeKalb County**, out of 1,810 CTE students, 46.2% earned a credential of value. When broken down by the value of the CTE pathway, 60.3% of students in High Value CTE, 24.9% in Moderate Value CTE, and 60.6% in Less than Moderate Value CTE earned a credential of value. This suggests that students in High Value and Less than Moderate Value CTE pathways in DeKalb County are more likely to earn a credential of value compared to those in Moderate Value pathways.

LaGrange County, with 1,144 CTE students, has a lower overall percentage of students earning a credential of value (27.9%). The percentage of students earning a credential of value is highest in Moderate Value CTE (39.2%), followed by Less than Moderate Value CTE (52.9%), and is lowest in High Value CTE (13.3%).

Noble County has the lowest overall percentage of students earning a credential of value (17.7%) among the four counties and the Impact Institute. Only 7.3% of students in High Value CTE earned a credential of value, compared to 26.3% in Moderate Value CTE and 32.8% in Less than Moderate Value CTE.

Steuben County, despite having the smallest number of CTE students (237), also has a low percentage of students earning a credential of value (4.6%). Notably, no students in High Value CTE or Less than Moderate Value CTE earned a credential of value, and only 11.2% of students in Moderate Value CTE did so.

The **Impact Institute**, with 1,298 CTE students, has the highest overall percentage of students earning a credential of value (74.6%). The percentage of students earning a credential of value is similarly high across all CTE pathways, with 77.3% in High Value CTE, 77.5% in Moderate Value CTE, and 67.0% in Less than Moderate Value CTE. As a vocational cooperative that has been offering career and technical education in this region for decades, and where spots in programs of study can be highly competitive (especially in the health services programs), it is understandable that the students at the Impact Institute would be leading the ecosystem in earning credentials of value.

This data reveals significant disparities across the region in terms of students earning a credential of value. The Impact Institute stands out with the highest percentage of students earning a credential of value, while Noble County and Steuben County have the lowest percentages. Furthermore, the data suggests that students in Less than Moderate Value CTE pathways are more likely to earn a credential of value compared to those in High Value and Moderate Value pathways.

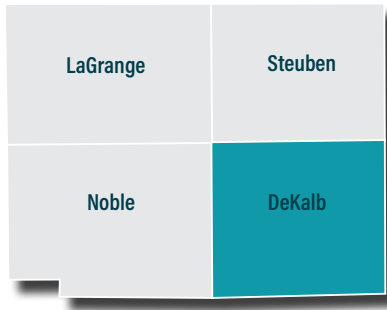


Alignment to Labor Market Demand

This section aims to provide an empirical understanding of how well the technical education ecosystem in DeKalb, LaGrange, Noble, and Steuben counties caters to the needs of the prominent industries in their respective regions. The findings from this analysis will shed light on the efficacy of the current CTE offerings in preparing students for gainful employment and contributing to the growth and sustainability of the local economies.

To evaluate the alignment of CTE programs of study with local labor market demand, the top three industries in each county were identified using labor market reports from Lightcast. These industries were then mapped to programs of study to determine which programs either lead directly to these industries or include skills and credentials of value that aligned with the entry level skills of these industries. The InTERS data included in this section is broken down by each high school in the county as well as county totals. The data from the Impact Institute is used in alignment to the top industries of the 4-county region since it serves students from all four counties.

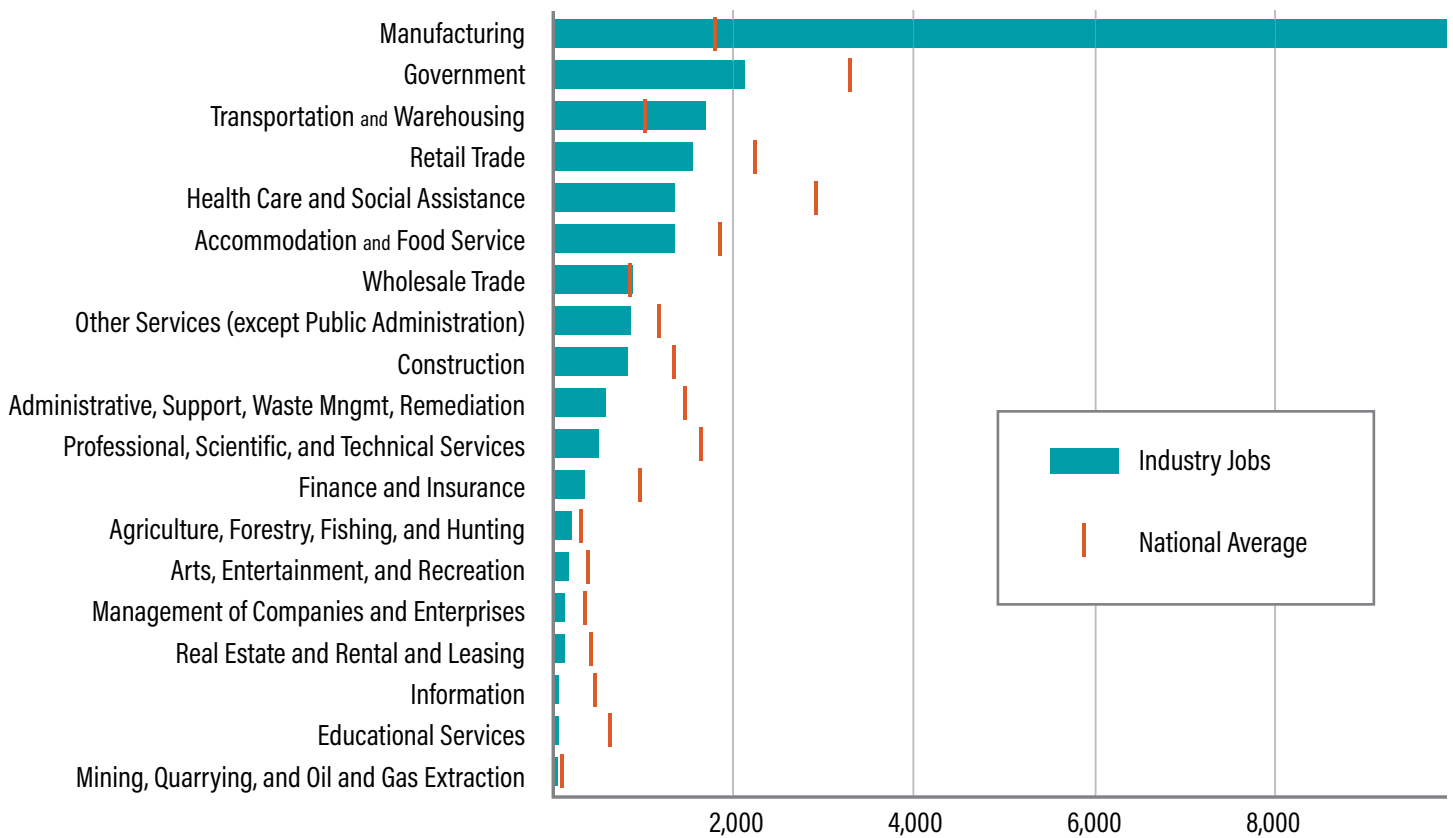




DeKalb County

The top three industries in DeKalb County are Manufacturing, Government, and Transportation and Warehousing. Manufacturing grew by 4% from 2017 to 2022, adding 363 jobs. The county is also expected to see significant growth in the Professional, Scientific, and Technical Services sector (18%) and a decline in the Health Care and Social Assistance sector (-21%).

Largest Industries in DeKalb County



Source: Lightcast, 2023

Of the CTE programs of study offered to DeKalb County high school students in the 2022-2023 school year, the following programs best align with these top industries:

- **Manufacturing: Advanced Manufacturing; STEM: Engineering**
- **Government: Business Management, Marketing, and Finance; Criminal Justice**
- **Transportation and Warehousing: Advanced Manufacturing**

	DEKALB CENTRAL HIGH SCHOOL		
	Student Total	# of Students in that Total Earning a Credential of Value	% of Students in that Total Earning a Credential of Value
Business Management, Marketing, and Finance	157	39	24.8%
Finance and Investment	9	6	66.7%
Accounting	10	0	0.0%
Business Admin	138	33	23.9%
Law and Public Safety	31	16	51.6%
Criminal Justice	31	16	51.6%
STEM	85	22	25.9%
Engineering	41	7	17.1%
Engineering; Design Technology	38	10	26.3%
Engineering; Electronics and Computer Technology	6	5	83.3%
Grand Total	273	77	28.2%

	EASTSIDE JUNIOR-SENIOR HIGH SCHOOL		
	Student Total	# of Students in that Total Earning a Credential of Value	% of Students in that Total Earning a Credential of Value
Advanced Manufacturing	54	50	92.6%
Advanced Manufacturing	54	50	92.6%
Business Management/Marketing and Finance	6	0	0.0%
Business Admin	6	0	0.0%
Grand Total	60	50	83.3%

	GARRETT HIGH SCHOOL		
	Student Total	# of Students in that Total Earning a Credential of Value	% of Students in that Total Earning a Credential of Value
Advanced Manufacturing	122	122	100.0%
Industry 4.0 - Smart Manufacturing	55	55	100.00%
Welding Technology	67	67	100.00%
Business Management, Marketing, and Finance	169	158	93.5%
Business Admin	11	0	0.0%
Accounting	11	11	100.0%
Business Admin	147	147	100.0%
STEM	44	43	97.7%
Engineering	17	17	100.0%
Engineering; Design Technology	16	15	93.8%
Engineering; Electronics and Computer Technology	11	11	100.0%
Grand Total	335	323	96.4%

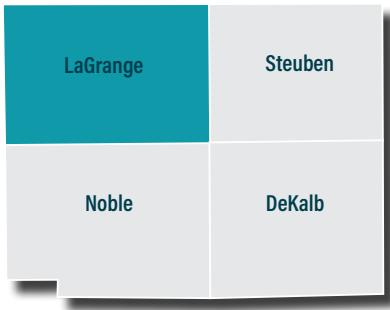
In DeKalb Central High School, there were 273 students enrolled in these CTE pathways, with 28.2% earning a credential of value. The pathways with the highest percentage of students earning a credential of value were Engineering; Electronics and Computer Technology (83.3%) and Business Management, Marketing, and Finance (66.7%). However, there were no students enrolled in Advanced Manufacturing, Industry 4.0 - Smart Manufacturing, or Welding Technology, which are directly related to the county's top industries. However, it should be noted that in the 2023-2024 school year, DeKalb High School will begin the new Baron Advanced Manufacturing (BAM) program, which includes high-quality work-based learning opportunities for advanced manufacturing students. This new program could potentially lead to an increase in the number of students completing the advanced manufacturing programs of study.

Eastside Junior-Senior High School had fewer students enrolled in these CTE pathways (60 students), but a higher percentage of students earned a credential of value (83.3%). All these students were enrolled in Advanced Manufacturing, with 92.6% earning a credential of value. This suggests that Eastside Junior-Senior High School is effectively preparing students for careers in Fabricated Metal Product Manufacturing and Primary Metal Manufacturing since students can pass industry standard exams to earn a credential of value.

Garrett High School had the highest number of students enrolled in these CTE pathways (335 students) and the highest percentage of students earning a credential of value (96.4%). Every student enrolled in Advanced Manufacturing, Industry 4.0 - Smart Manufacturing, Welding Technology, and Business Admin earned a credential of value. This suggests that Garrett High School is highly effective in preparing students for careers in the county's top industries since almost all their students can pass an industry standard exam and earn a credential of value.

In total, across all three high schools in DeKalb County, there were 668 of 1810 students (36.9%) enrolled in these CTE pathways, with 67.4% earning a credential of value. The programs of study with the highest percentage of students earning a credential of value were Industry 4.0 - Smart Manufacturing (100.0%), Welding Technology (100.0%), and Advanced Manufacturing (97.7%).

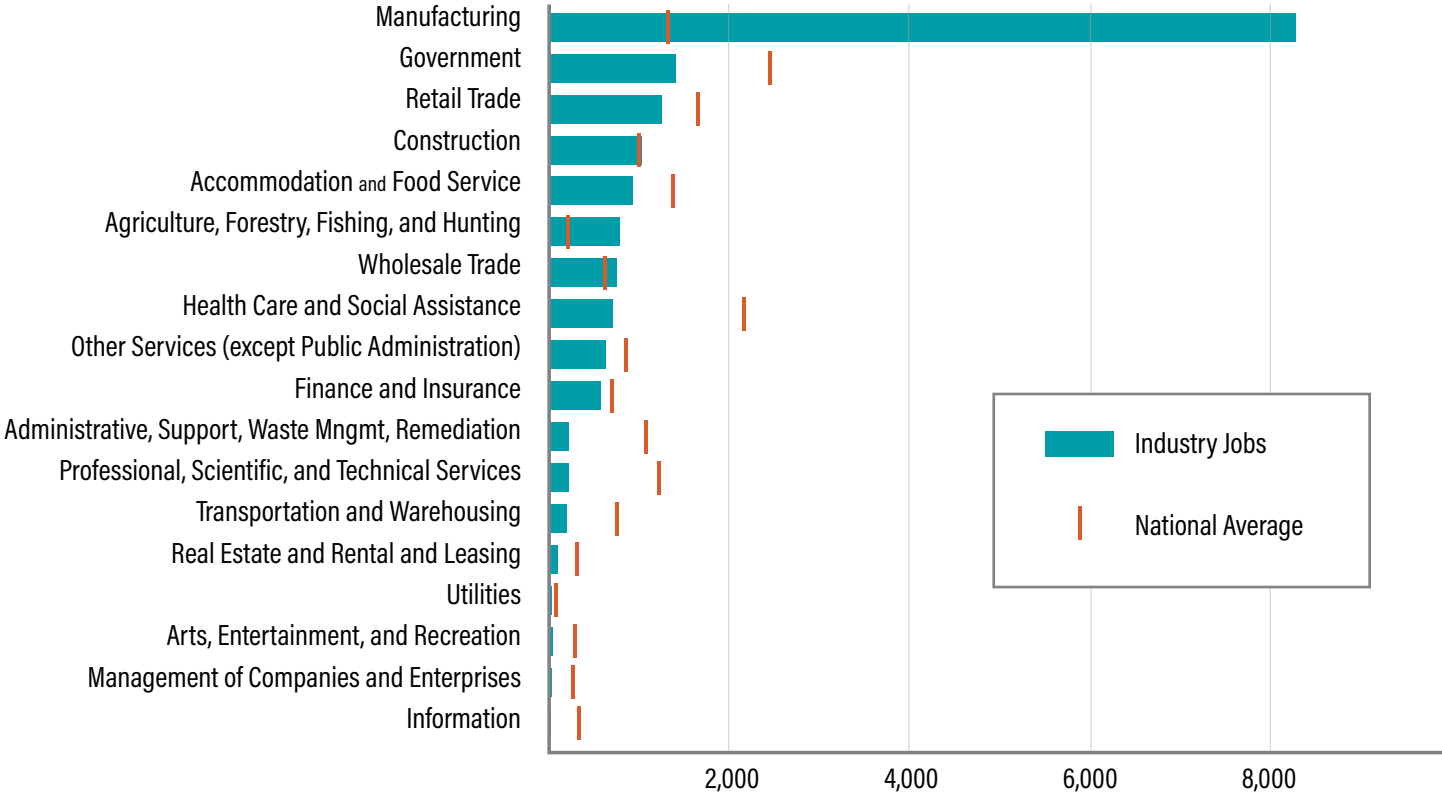
	DEKALB COUNTY TOTALS		
	Student Total	# of Students in that Total Earning a Credential of Value	% of Students in that Total Earning a Credential of Value
Advanced Manufacturing	176	172	97.7%
Advanced Manufacturing	54	50	92.6%
Industry 4.0 - Smart Manufacturing	55	55	100.0%
Welding Technology	67	67	100.0%
Business Management, Marketing, and Finance	332	197	59.3%
Business Admin	11	0	0.0%
Finance and Investment	9	6	66.7%
Accounting	21	11	52.4%
Business Admin	291	180	61.9%
Law and Public Safety	31	16	51.6%
Criminal Justice	31	16	51.6%
STEM	129	65	50.4%
Engineering	58	24	41.4%
Engineering; Design Technology	54	25	46.3%
Engineering; Electronics and Computer Technology	17	16	94.1%
Grand Total	668	450	67.4%



LaGrange County

In LaGrange County, the top three industries are Manufacturing, Government, and Retail Trade. Manufacturing is expected to grow by 11%, adding 815 jobs. Retail Trade is expected to decrease slightly by 2%, losing 20 jobs. Government jobs are expected to remain stable with no change. The county is also expected to see significant growth in the Construction sector (37%) and a decline in the Information sector (-46%).

Largest Industries in LaGrange County



Source: Lightcast, 2023

Of the CTE programs of study offered to LaGrange County high school students in the 2022-2023 school year, the following programs best align with these top industries. Because the construction industry is expected to see significant growth in LaGrange County, with higher wage jobs than retail trades, construction was used for this labor market alignment analysis.

- **Manufacturing: Advanced Manufacturing**
- **Government: Business Management, Marketing, and Finance**
- **Construction: Architecture and Construction**

	LAKELAND JUNIOR-SENIOR HIGH SCHOOL		
	Student Total	# of Students in that Total Earning a Credential of Value	% of Students in that Total Earning a Credential of Value
Advanced Manufacturing	20	8	40.0%
Advanced Manufacturing	8	8	100.0%
Industry 4.0 - Smart Manufacturing	12	0	0.0%
Architecture and Construction	55	0	0.0%
Carpentry	31	0	0.0%
Construction Trades	24	0	0.0%
Business Management, Marketing, and Finance	75	0	0.0%
Business Admin	60	0	0.0%
Finance and Investment	15	0	0.0%
Grand Total	150	8	5.3%

	PRAIRIE HEIGHTS SENIOR HIGH SCHOOL		
	Student Total	# of Students in that Total Earning a Credential of Value	% of Students in that Total Earning a Credential of Value
Advanced Manufacturing	27	24	88.9%
Welding Technology	27	24	88.9%
Business Management/Marketing and Finance	12	0	0.0%
Business Admin	12	0	0.0%
Grand Total	39	24	61.5%

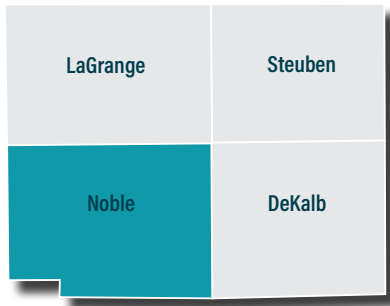
	WESTVIEW JUNIOR-SENIOR HIGH SCHOOL		
	Student Total	# of Students in that Total Earning a Credential of Value	% of Students in that Total Earning a Credential of Value
Advanced Manufacturing	25	0	0.0%
Industry 4.0 - Smart Manufacturing	25	0	0.0%
Business Management, Marketing, and Finance	32	0	0.0%
Business Admin	32	0	0.0%
Grand Total	57	0	0.0%

In Lakeland High School, there were 150 students enrolled in these CTE pathways, with only 5.3% earning a credential of value. The pathways with the highest percentage of students earning a credential of value were Advanced Manufacturing (100.0%). However, there were no students enrolled in Welding Technology, Architecture and Construction, and Business Management, Marketing, and Finance who earned a credential of value.

Prairie Heights Senior High School had fewer students enrolled in these CTE pathways (39 students), but a higher percentage of students earned a credential of value (61.5%). All these students were enrolled in Advanced Manufacturing and Welding Technology, with 88.9% earning a credential of value in both pathways. This suggests that Prairie Heights Senior High School is effectively preparing students for careers in Wood Product Manufacturing and Transportation Equipment Manufacturing since most students passed industry standard exams.

In total, across all three high schools in LaGrange County, there were 246 out of 1144 CTE students (21.5%) enrolled in these CTE pathways, with 13.0% earning a credential of value. The pathways with the highest percentage of students earning a credential of value were Advanced Manufacturing (100.0%) and Welding Technology (88.9%).

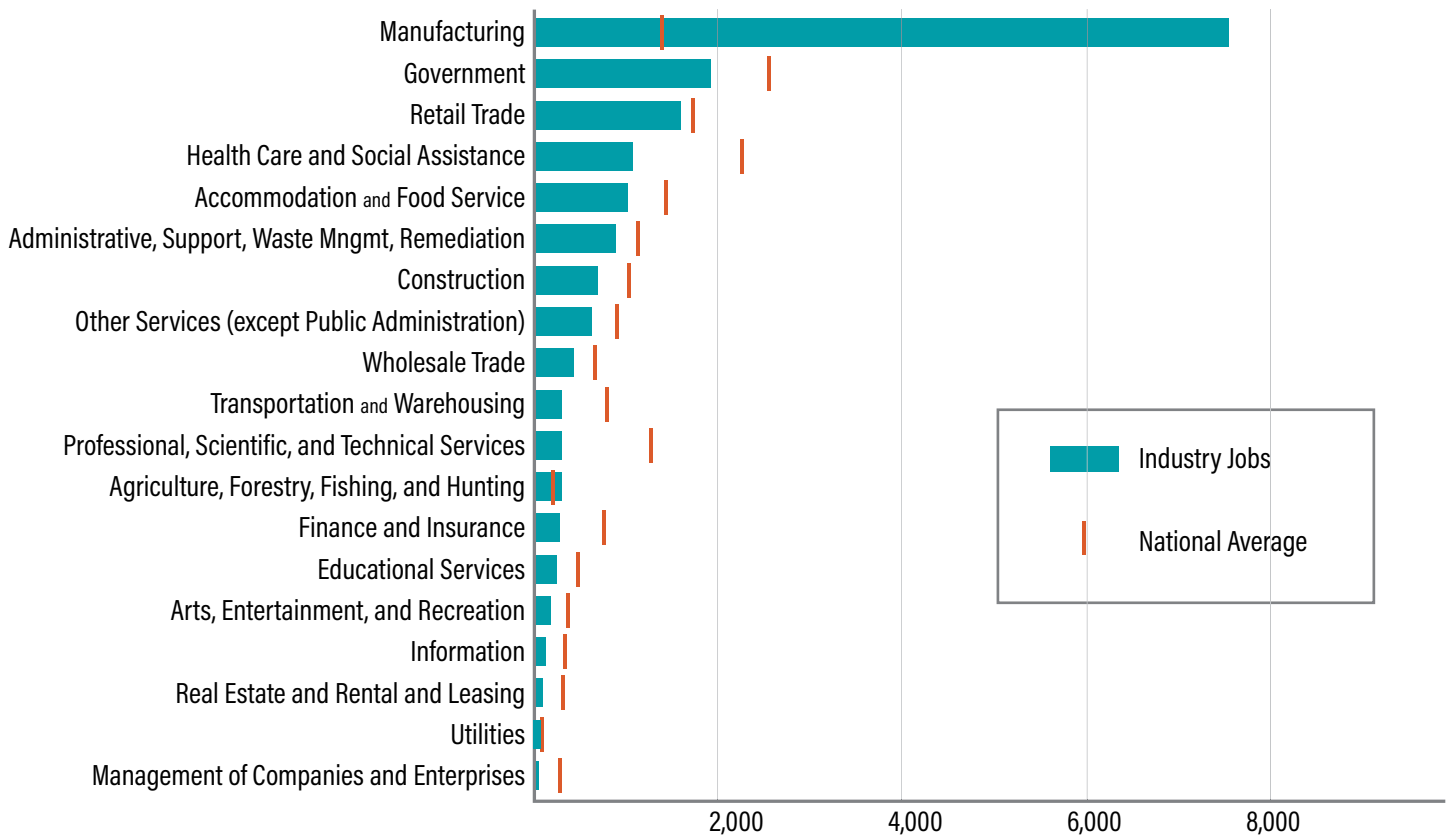
	LAGRANGE COUNTY TOTALS		
	Student Total	# of Students in that Total Earning a Credential of Value	% of Students in that Total Earning a Credential of Value
Advanced Manufacturing	72	32	44.4%
Advanced Manufacturing	8	8	100.0%
Industry 4.0 - Smart Manufacturing	37	0	0.0%
Welding Technology	27	24	88.9%
Architecture and Construction	55	0	0.0%
Carpentry	31	0	0.0%
Construction Trades	24	0	0.0%
Business Management, Marketing, and Finance	119	0	0.0%
Business Admin	104	0	0.0%
Finance and Investment	15	0	0.0%
Grand Total	246	32	13.0%



Noble County

The top three industries in Noble County are Manufacturing, Government, and Retail Trade. The county is also expected to see significant growth in the Administrative and Support and Waste Management and Remediation Services sector (87%) and a decline in the Health Care and Social Assistance sector (-16%).

Largest Industries in Noble County



Source: Lightcast, 2023

Of the CTE programs of study offered to Noble County high school students in the 2022-2023 school year, the following programs best align with these top industries.

- **Manufacturing:** Advanced Manufacturing; STEM: Engineering
- **Government:** Business Management, Marketing, and Finance; Criminal Justice

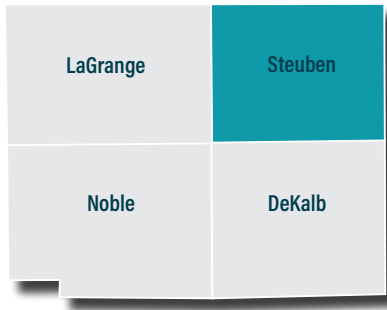
In East Noble High School, there were 135 students enrolled in these CTE pathways, with 19.3% earning a credential of value. The pathway with the highest percentage of students earning a credential of value was STEM, specifically Engineering and Design Technology, with 52.0% of students earning a credential. However, there were no students in Advanced Manufacturing and Industry 4.0 - Smart Manufacturing who earned a credential of value, which are directly related to the county's top industries.

In total, across both high schools in Noble County, there were 290 out of 1350 CTE students (21.4%) enrolled in these CTE pathways, with only 9.0% earning a credential of value. The pathway with the highest percentage of students earning a credential of value was Engineering and Design Technology (26.5%).

	EAST NOBLE HIGH SCHOOL		
	Student Total	# of Students in that Total Earning a Credential of Value	% of Students in that Total Earning a Credential of Value
Advanced Manufacturing	10	0	0.0%
Industry 4.0 - Smart Manufacturing	10	0	0.0%
Business Management, Marketing, and Finance	75	0	0.0%
Business Admin	75	0	0.0%
STEM	50	26	52.0%
Engineering; Design Technology	50	26	52.0%
Grand Total	135	26	19.3%

	WEST NOBLE HIGH SCHOOL		
	Student Total	# of Students in that Total Earning a Credential of Value	% of Students in that Total Earning a Credential of Value
Business Management/Marketing and Finance	91	0	0.0%
Business Admin	91	0	0.0%
STEM	64	0	0.0%
Engineering	16	0	0.0%
Engineering; Design Technology	48	0	0.0%
Grand Total	155	0	0.0%

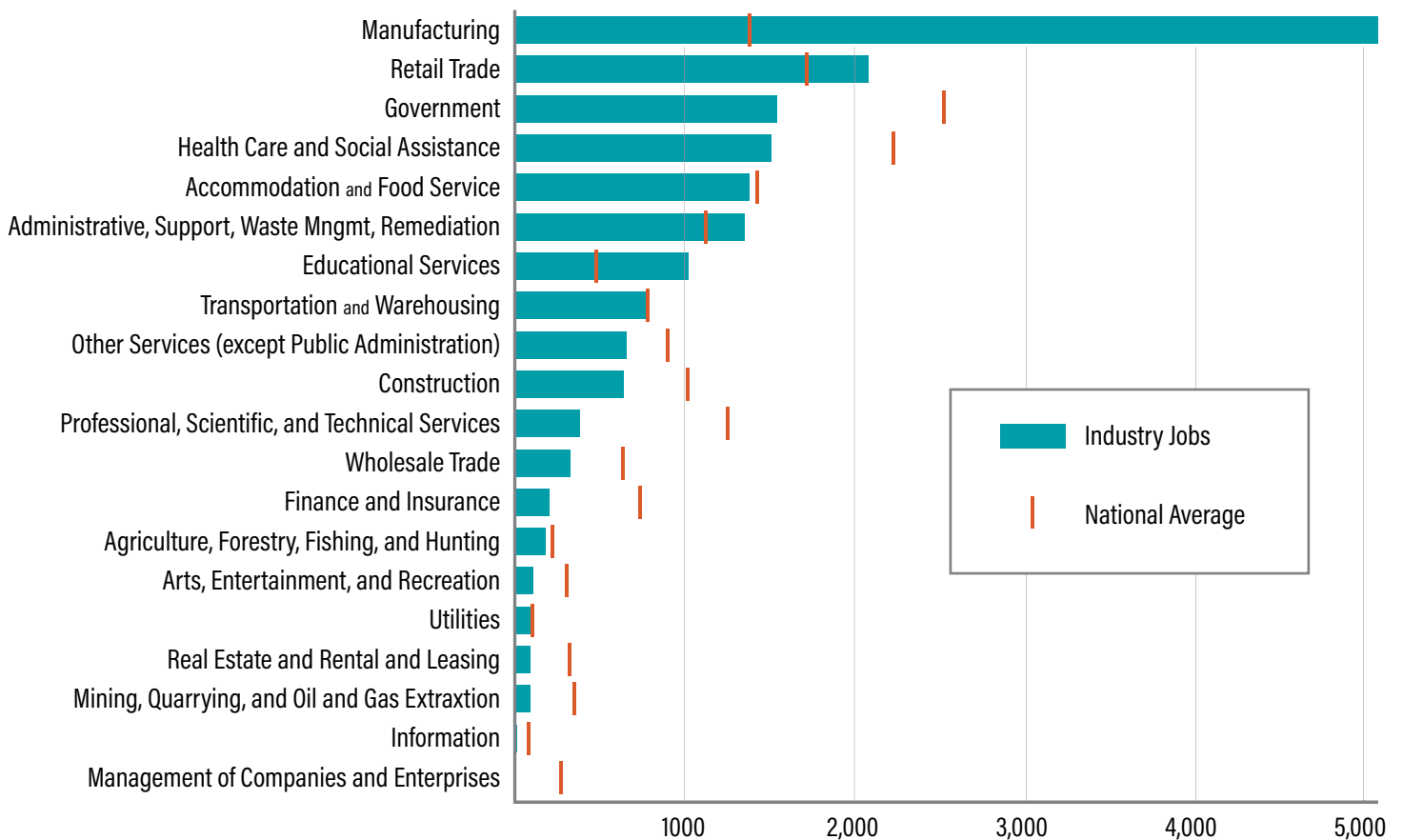
	NOBLE COUNTY TOTALS		
	Student Total	# of Students in that Total Earning a Credential of Value	% of Students in that Total Earning a Credential of Value
Advanced Manufacturing	10	0	0.0%
Industry 4.0 - Smart Manufacturing	10	0	0.0%
Business Management, Marketing, and Finance	166	0	0.0%
Business Admin	166	0	0.0%
STEM	114	26	22.8%
Engineering	16	0	0.0%
Engineering; Design Technology	98	26	26.5%
Grand Total	290	26	9.0%



Steuben County

In Steuben County, the top four industries are Manufacturing, Retail Trade, Government, and Healthcare and Social Assistance. Retail Trade is expected to remain stable with no change. Health Care and Social Assistance is expected to grow by 8%, adding 108 jobs. Manufacturing is expected to decrease by 5%, losing 295 jobs. The county is also expected to see significant growth in the Professional, Scientific, and Technical Services sector (111%) and a decline in the Real Estate and Rental and Leasing sector (-21%).

Largest Industries in Steuben County



Source: Lightcast, 2023

Of the CTE programs of study offered to Steuben County high school students in the 2022-2023 school year, the following programs best align with these top industries:

- **Manufacturing: Advanced Manufacturing; STEM: Engineering**
- **Government: Business Management, Marketing, and Finance**
- **Retail Trade: Culinary Arts and Hospitality**

In Angola High School, there were 91 students enrolled in these CTE pathways, but none of them earned a credential of value. The pathways offered at this school were Advanced Manufacturing, Business Management, Marketing, and Finance, and Culinary Arts and Hospitality. Despite the alignment of these pathways with the county's top industries, particularly the Culinary Arts and Hospitality pathway with the Retail Trade industry, no students earned a credential of value.

Fremont High School had a smaller number of students enrolled in these CTE pathways (12 students), and similarly, none of them earned a credential of value. The only pathway offered at this school was Business Management, Marketing, and Finance.

Hamilton Community High School had the smallest number of students enrolled in these CTE pathways (23 students), with the only pathway being Engineering and Design Technology, a part of the STEM field. Again, none of these students earned a credential of value.

	ANGOLA HIGH SCHOOL		
	Student Total	# of Students in that Total Earning a Credential of Value	% of Students in that Total Earning a Credential of Value
Advanced Manufacturing	23	0	0.0%
Advanced Manufacturing	23	0	0.0%
Business Management, Marketing, and Finance	37	0	0.0%
Business Admin	37	0	0.0%
Hospitality	31	0	0.0%
Culinary Arts and Hospitality	31	0	0.0%
Grand Total	91	0	0.0%

	FREMONT HIGH SCHOOL		
	Student Total	# of Students in that Total Earning a Credential of Value	% of Students in that Total Earning a Credential of Value
Business Management/Marketing and Finance	12	0	0.0%
Business Admin	12	0	0.0%
Grand Total	12	0	0.0%

	HAMILTON COMMUNITY HIGH SCHOOL		
	Student Total	# of Students in that Total Earning a Credential of Value	% of Students in that Total Earning a Credential of Value
Business Management, Marketing, and Finance	6	0	0.0%
Business Admin	16	0	0.0%
STEM	7	26	0.0%
Engineering; Design Technology	7	0	0.0%
Grand Total	23	0	0.0%

In total, across all three high schools in Steuben County, there were 126 out of 237 CTE students (53.2%) enrolled in these CTE programs of study, making it the county with the highest ratio of CTE students in regionally high-demand pathways. While no students earned a credential of value in these courses in the 2022-2023 school year, it should be noted that most of these courses were at the first level of the program of study, indicating that these programs are relatively new and will likely yield more credentials of value as students progress into higher levels of the programs of study.

	STEUBEN COUNTY TOTALS		
	Student Total	# of Students in that Total Earning a Credential of Value	% of Students in that Total Earning a Credential of Value
Advanced Manufacturing	23	0	0.0%
Advanced Manufacturing	23	0	0.0%
Business Management, Marketing, and Finance	65	0	0.0%
Business Admin	65	0	0.0%
Hospitality	31	0	0.0%
Culinary Arts and Hospitality	31	0	0.0%
Grand Total	126	0	0.0%

Impact Institute and Regional Alignment

The top three industries in the 4-county region are Manufacturing, Government, and Retail Trade.

MANUFACTURING

In 2010, the Manufacturing sector employed 21,925 people, and it is projected to employ 31,174 people by 2023, representing a significant increase of 42.18%. This growth suggests a robust and expanding manufacturing sector in the region, which could offer a wealth of job opportunities for residents.

GOVERNMENT

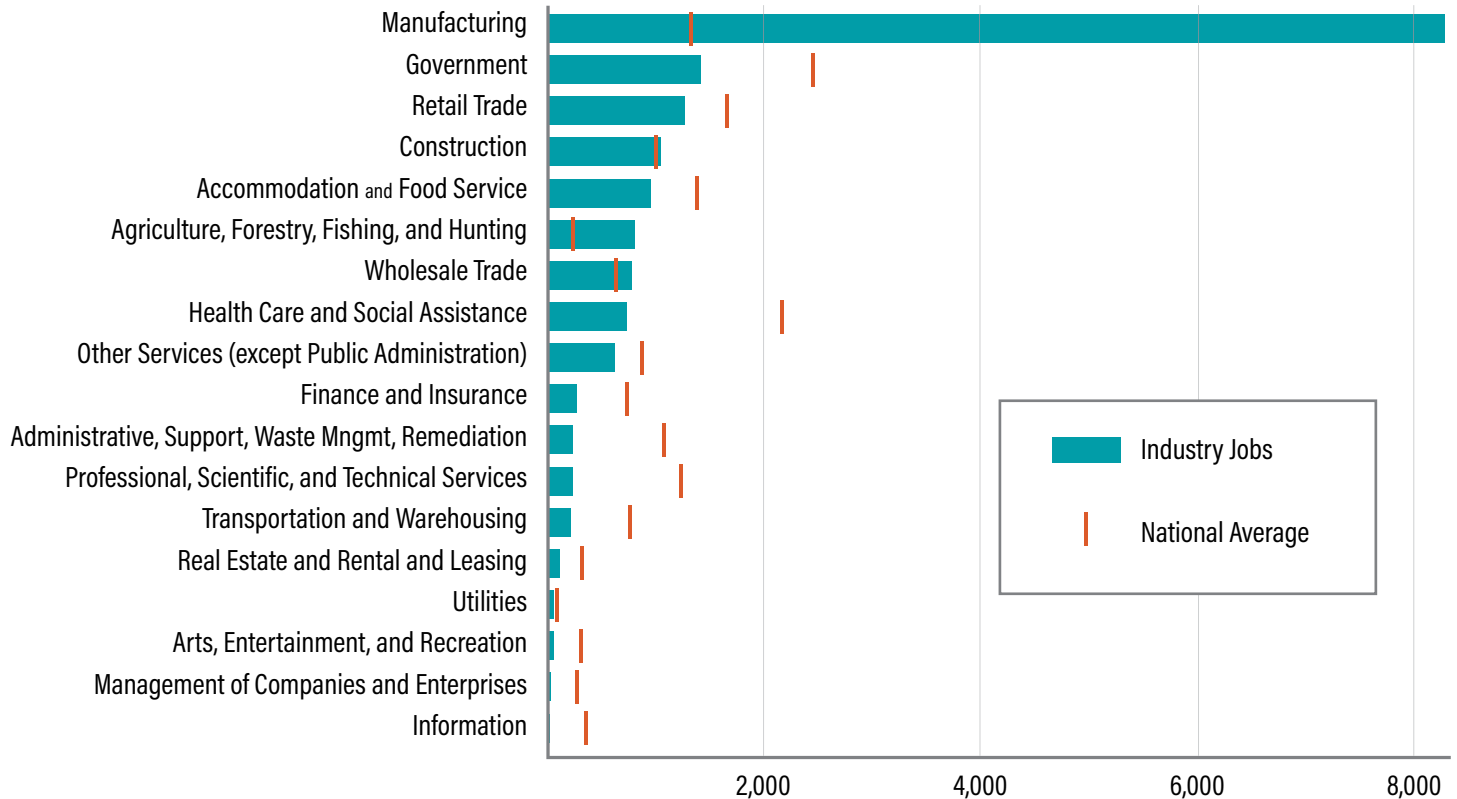
The Government sector, which employed 7,465 people in 2010, is expected to see a decrease of 6.80% by 2023, with a projected employment of 6,957. This decline could be due to a variety of factors, including budget cuts, automation, or a shift in public sector jobs to the private sector.

RETAIL TRADE

The Retail Trade sector employed 5,968 people in 2010 and is projected to employ 6,432 by 2023, an increase of 7.78%. This growth, while not as substantial as that in the Manufacturing sector, still indicates a steady demand for retail jobs in the region.

Looking beyond the top three industries, it's worth noting the substantial growth expected in the Transportation and Warehousing sector, which is projected to increase by a staggering 129.15% from 2010 to 2023. This growth could be driven by the rise of e-commerce and the corresponding need for transportation and logistics services.

Largest Industries in the 4-County Region



Source: Lightcast, 2023

Since the Impact Institute serves CTE students from all four counties, its programs of study were aligned to the labor market needs of the entire region. In the 2022-2023 school year, the following programs best align with these top industries:

- **Manufacturing: Advanced Manufacturing**
- **Government: Business Management, Marketing, and Finance; Law and Public Safety**
- **Retail Trade: Culinary and Hospitality**
- **Accommodation and Food Services: Culinary and Hospitality**
- **Health Care: Health Services**
- **Transportation and Warehousing: Advanced Manufacturing; Transportation**
- **Construction: Architecture and Construction**

In the Advanced Manufacturing pathway, which aligns with the region's top industry, there were 251 students, and a high percentage of them (84.9%) earned a credential of value. This suggests that this pathway is effectively preparing students for careers in the manufacturing industry. The Industry 4.0 - Smart Manufacturing pathway had fewer students (36), and a lower percentage of them (25.0%) earned a credential of value. This could indicate a need for improvement in this pathway. The Precision Machining and Welding Technology pathways, which also align with the manufacturing industry, had high percentages of students earning a credential of value (90.2% and 96.3% respectively), suggesting effective preparation for careers in these areas.

In the Architecture and Construction pathway, which aligns with another top industry in the region, there were 151 students, with 53.6% of them earning a credential of value. The Construction Trades sub-pathway had a higher success rate, with 81.8% of its 22 students earning a credential.

The Health Sciences pathway, aligning with the healthcare industry, had 170 students, with 69.4% of them earning a credential of value. This suggests a moderate level of success in preparing students for careers in healthcare.

The Hospitality pathway, which aligns with the Accommodation and Food Services industry, had 107 students, with a high percentage of them (84.1%) earning a credential of value. This suggests effective preparation for careers in this industry.

The Law and Public Safety pathway, aligning with the government sector, had 172 students, with a very high percentage of them (98.3%) earning a credential of value. This suggests excellent preparation for careers in this sector.

The Transportation pathway, which could align with both the manufacturing and retail trade industries, had 226 students, with 73.0% of them earning a credential of value. This suggests a moderate to high level of success in preparing students for careers in this field.

In total, across all pathways at the Impact Institute, there were 1077 out of 1298 CTE students (83.0%) enrolled in these high-demand programs of study, with 776% of them earning a credential of value. This suggests that the Impact Institute is generally successful in preparing students for careers in the region's top industries.

	IMPACT INSTITUTE		
	Student Total	# of Students in that Total Earning a Credential of Value	% of Students in that Total Earning a Credential of Value
Advanced Manufacturing	251	213	84.9%
Advanced Manufacturing	36	9	25.0%
Industry 4.0 - Smart Manufacturing	51	26	90.2%
Welding Technology	164	158	96.3%
Architecture and Construction	151	81	53.6%
Carpentry	47	6	12.8%
Construction Trades	22	18	81.8%
HVAC	82	57	69.5%
Health Sciences	170	118	69.4%
Pre-Nursing	170	118	69.4%
Hospitality	107	90	84.1%
Culinary	47	42	89.4%
Hospitality	60	48	80.0%
Law and Public Safety	31	16	51.6%
Criminal Justice	31	16	51.6%
Transportation	226	165	73.0%
Auto Collision Repair	72	51	70.8%
Auto Service	154	114	74.0%
Grand Total	1077	836	77.6%

Recommendations

Transitioning to a critical juncture of this report, the Recommendations Section aims to provide actionable guidance to community, education, and industry leaders in DeKalb, LaGrange, Noble, and Steuben counties who are committed to enhancing the technical education ecosystem in their respective counties and the 4-county region. The recommendations are designed to address the unique challenges and opportunities identified through rigorous data analysis and stakeholder engagement process.

The development of these recommendations was an extensive and collaborative effort, grounded in both quantitative and qualitative research. It began with an in-depth analysis of the programs of study data, providing valuable insights into the current state of technical education in each county and the region. This data-driven approach allowed for the identification of trends, gaps, and areas of strength within the technical education landscape.

Complementing this data analysis, direct engagement with key stakeholders in each county was undertaken. This process involved comprehensive interviews with 18 leaders from various sectors, including employers, higher education institutions, workforce agencies, and K-12 schools. These conversations offered invaluable perspectives on the realities on the ground, the challenges faced by different sectors, and the opportunities for improvement.

In addition to these interviews, focus groups were conducted with 39 high school students across the counties. These discussions provided a unique window into the experiences, aspirations, and concerns of the students themselves, who are, after all, the primary beneficiaries of the technical education ecosystem.

Finally, the local data analysis and stakeholder engagement were supplemented with a review of best practices from around the country. This research allowed for the identification of proven strategies and innovative approaches that could be adapted to the local context.

The result of this comprehensive process is a set of recommendations that are both evidence-based and grounded in the realities of each county and the region. The following sections will present a set of county-specific recommendations, tailored to the unique circumstances and needs of each county. This will be followed by a set of recommendations for the region, aimed at fostering regional collaboration and leveraging shared resources and opportunities.

These recommendations provide a roadmap for enhancing the technical education ecosystem in the 4-county region. By working together, the technical education system can meet the needs of students, employers, and communities, both now and in the future.

DeKalb County

In the heartland of Northeast Indiana, DeKalb County has emerged as a hub for innovative approaches to Career and Technical Education (CTE) for high school students. The following section presents recommendations for community stakeholders to help keep the momentum going in DeKalb County.

STRENGTHEN EMPLOYER BUY-IN

To address the challenge of employer buy-in, it is recommended that education and workforce leaders engage in more targeted communication with employers. This could involve presenting clear data on the benefits of CTE programs, not only for students but also for employers in terms of creating a skilled workforce. Employers could be invited to participate in CTE program development, providing them with a sense of ownership and investment in the outcomes. Manufacturing employers actively engaging with the high schools to offer high-quality work-based learning (WBL) opportunities for the 172 DeKalb County students with advanced manufacturing credentials¹⁵ have established a strong pipeline to meet the demand of 363 net new jobs in the county¹⁶ over the last 5 years. Moreover, with 74 employers in the county actively seeking manufacturing talent, there is a prime opportunity for collaborative efforts among schools, economic development entities, foundations, and community organizations to further bolster the workforce and enhance the community's overall strength.¹⁷

ENHANCE TRANSPORTATION SOLUTIONS

To address the transportation barrier and enable students to engage in valuable work-based learning (WBL) experiences, innovative solutions are essential. The manufacturing industry in DeKalb County highly benefits from in-person learning opportunities, as students gain significant value from witnessing facilities and machines firsthand. One approach could be establishing partnerships with local transportation providers. This could involve partnerships with local transportation providers, including the DeKalb Area Rural Transit Authority (DART). In cases where transportation cannot be arranged, explore the option of incorporating remote or online elements into WBL (e.g., remote work).

BRIDGE THE GENERATIONAL GAP

To address the generational gap in perceptions of work and professionalism, it is recommended that employers engage in consistent and intentional open dialogue with students. This could involve forums or workshops where students and employers can discuss their expectations and find common ground. In DeKalb County, two employers are implementing best practices to accommodate generational differences and preferences. The first is a steel manufacturer testing a 4-day work week, offered to employees based on performance. Meanwhile, another manufacturer in the area has introduced three scheduling options (12-hour shifts, 8-hour shifts, and flexible shifts) to accommodate workers' preferences.

PERSONALIZED CAREER ADVISING

To address students' desire for more personalized advice and mentorship, schools could consider implementing a mentorship program where each CTE student is paired with a mentor from their chosen industry. This would provide students with personalized guidance and a direct connection to the workforce. Also, given that students overwhelmingly see the value of the skills and credentials they earn in their CTE classes, this personalized career advising should include helping students view their experiences using skill-based language, and how they can easily reskill their CTE experiences into other industries/careers (e.g., helping a student in a computer science pathway understand how to reskill their coding expertise into manufacturing).

¹⁵ InTERS/Performance and Accountability. Retrieved from <https://www.in.gov/gwc/cte/intersperformance-and-accountability/>

¹⁶ Lightcast™, [https://analyst.lightcast.io/analyst/?t=4MQ35#h=qgQmv&page=industry_report&vertical=edo&nation=us], 2022.

¹⁷ Lightcast™, [https://analyst.lightcast.io/analyst/?t=4MQ35#h=qgPyq&page=edo_industry_snapshot&vertical=edo&nation=us], 2022.

LaGrange County

In the heartland of Northeast Indiana, LaGrange County is a community deeply committed to the future of its young residents. The county's active engagement in enriching the Career and Technical Education (CTE) landscape equips high school students with skills and knowledge for high-demand careers. However, this work also presents some challenges for school systems, employers, and higher education partners. The following section provides some recommendations to the leaders in LaGrange County on how they can continue to grow and develop their technical education ecosystem.

STRUCTURED COLLABORATION:

To enhance the CTE experience for students, more structured collaboration between schools, employers, and higher education institutions is needed to offer engaging career exploration and work-based learning opportunities related to specific pathways (e.g., Manufacturing Day) instead of general events (e.g., Career Fairs). community field trips to ITCC, showcasing technology and manufacturing labs, student demonstrations, and employer job fairs. This approach fosters meaningful interactions with industry leaders, leading to a stronger understanding and connection to the industry.

INNOVATIVE APPROACHES TO CTE STUDENT RECRUITMENT

To enhance students' career planning process, developing, and implementing innovative approaches to recruiting students into CTE courses is recommended. This could involve providing more in-depth, personalized discussions about career pathways, replacing more common electives with CTE courses, and promoting CTE courses by using the value-based terminology already used by current CTE students (e.g., cost savings, career exploration, hands-on curriculum, etc.).

PROMOTE RELATIONSHIP BETWEEN EMPLOYMENT AND ENROLLMENT

Develop consistent talking points to use with students as early as possible to help them see and understand the relationship between employment and enrollment after graduation, and that instead of one being "more valuable" than the other, that the two work together to increase skills and wages. This could include addressing common misconceptions, bringing in employers with tuition assistance programs to share how they work, and presentations to address ways to avoid student debt.

Noble County

Noble County's Career and Technical Education (CTE) ecosystem has shown commendable progress, with successful collaborative efforts, a variety of high-quality work-based learning experiences, and an effective focus on developing employability skills in students. However, there are challenges to be addressed and opportunities for further growth and enhancement. Below are recommendations on how the key stakeholders in Noble County can address some of these challenges while also building on the outstanding momentum happening in its technical education ecosystem.

IMPROVE TRANSPORTATION

To address the challenge of transportation and accessibility, creative solutions must be sought. One such solution could be to form partnerships with local government agencies or private transportation services to provide subsidized transportation for students participating in work-based learning opportunities. The development of remote work-based learning experiences is another potential solution, where students can connect with employers virtually for internships or project-based learning experiences. Establishing local community hubs or satellite sites for work-based learning can also reduce the distance students need to travel.

PROMOTE CTE IN ALIGNMENT WITH STUDENT PERCEPTIONS:

Rather than primarily focusing on the traditional narrative of CTE as a pathway to full-time careers, the promotion should also highlight how CTE equips students with practical skills that can be applied in their personal lives and offer opportunities to earn money while pursuing further education. Advertising campaigns and informational sessions about CTE programs should emphasize the 'real-world' skills that students can acquire, how these skills can be applied in everyday life, and how they can foster self-reliance and independence. Show students how skills learned in CTE courses can be used to create side businesses or part-time jobs that can generate income while they're still in school or pursuing further education. As part of this, consider developing a program or course module that specifically addresses the entrepreneurial aspects of CTE. This could include basic training on how to start a business, financial management, marketing, and customer service, enabling students to see the potential of turning their CTE skills into profitable ventures.

FACILITATE EMPLOYER-SCHOOL COMMUNICATION

A structured communication platform could be established where schools and employers can discuss potential collaborations, share information about upcoming opportunities, and address any concerns. A comprehensive guide or toolkit for teachers could streamline the planning, organization, and supervision of work-based learning experiences. Additionally, training sessions for employers on how to effectively engage with students and schools could be very beneficial.

Steuben County

Steuben County, Indiana, is a vibrant community with a diverse array of stakeholders invested in the future of Career and Technical Education (CTE) programs for high school students. The following recommendations will help guide the stakeholders involved in growing the technical ecosystem in this county.

IMPROVE COORDINATION

Improve the coordination of workforce efforts by designating an individual or team responsible for leading these strategies. This could involve creating a new role or assigning these responsibilities to an existing position within a designated intermediary within the community, such as the community foundation, which is already doing work as a convener within the community.

FACILITATE SCHOOL-INDUSTRY INTERACTION

Develop initiatives to facilitate better interaction between school systems and industry. This could include professional development programs for school staff to understand and communicate effectively with industry partners and creating platforms for regular dialogue and collaboration between schools and industry. One successful approach for promoting student and industry interaction is Made in Steuben, an annual event hosted by the Steuben County Economic Development Corporation in honor of National Manufacturing Day.¹⁸ The expo-style event has a dual purpose: to encourage local career exploration and foster connections with nearby employers for high school students. In this event, 120 students can connect with 20 local employers and learn about their products, highlights the positive community impact, and promotes a wide range of career paths and educational opportunities within the region. Notably, when surveyed for feedback on the event, it was found that females were 257% more likely to consider a career in manufacturing after attending Made in Steuben.

PROMOTE THE VALUE OF CTE

Launch a campaign to promote the value of CTE programs and shift perceptions that they are only for students who are struggling academically. Highlight the benefits of CTE programs in providing a foundation for lifelong learning and a breadth of knowledge that is valuable in today's dynamic job market. One successful example is Trine University promoting CTE by embedding certifications into coursework and partnering with an online training provider for allied healthcare and IT programs. This allows students to earn industry-recognized certifications, which can be transferred as articulated credits toward an online degree at Trine, potentially saving students up to 12 credits and \$6,000 in long-term tuition costs.¹⁹

SUPPORT RURAL EMPLOYERS

Develop strategies to support rural employers in their engagement with CTE programs. This could include financial incentives, resources to help manage student placements, and initiatives to connect rural employers with schools and students.

ENHANCE CAREER ADVISING

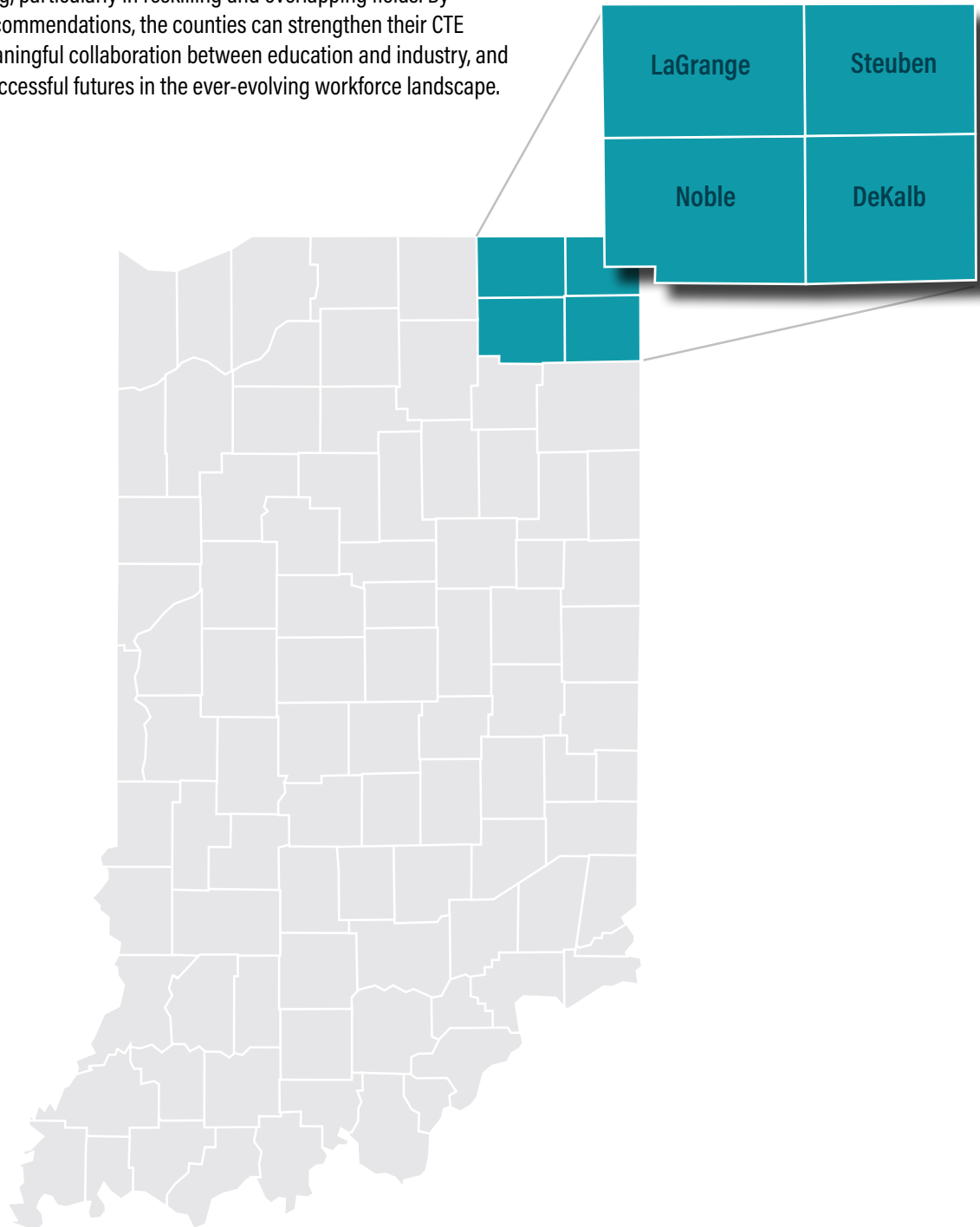
Improve career advising for high school students to increase their awareness of career opportunities and the value of CTE. This could involve training for guidance counselors, bringing in industry professionals for career talks, and organizing industry visits for students.

¹⁸ Manufacturing Institute. Retrieved from <https://mfgday.com/events/steuben-mfgday22/>

¹⁹ MedCerts: A Stride Company. Retrieved from <https://medcerts.com/blog/trine-university-and-medcerts-collaboration-brings-certifications-and-college-credits-to-students#:~:text=This%20partnership%20will%20allow%20current%20and%20prospective%20MedCerts,articulated%20credits%20that%20transfer%20towards%20an%20online%20degree.>

Region-wide Recommendations

The following recommendations outline strategies to enhance the Career and Technical Education (CTE) ecosystem in DeKalb, LaGrange, Noble, and Steuben counties, Indiana. These proposals address various challenges faced in the region, and they seek to create a consistent vision for the future, improve the language used to describe CTE courses, foster proactive community connections, and enhance career advising, particularly in reskilling and overlapping fields. By implementing these recommendations, the counties can strengthen their CTE programs, promote meaningful collaboration between education and industry, and prepare students for successful futures in the ever-evolving workforce landscape.



01.

COLLABORATE REGION-WIDE TO DEVELOP HIGH-QUALITY WORK-BASED LEARNING OPPORTUNITIES FOR HIGH SCHOOL STUDENTS.

The collaborative approach to work-based learning (WBL) opportunities has demonstrated great success in Northeast Indiana, and it is recommended to maintain and expand this approach. The effectiveness of initiatives like the Baron Advanced Manufacturing (BAM) program²⁰, facilitated by the Purdue IN-MAC program²¹, highlights the potential of such collaborative efforts. Specifically, BAM involved employers working closely with Lisa Deck, a Purdue IN-MAC consultant, and DeKalb High School for one year to establish a two-year work-based learning program for students pursuing advanced manufacturing pathways. Junior-year students in this pathway participate in job-shadowing rotations with different manufacturers in DeKalb County, followed by a paid internship at one of these manufacturers during their senior year. The collaborative development of this program ensured alignment with DeKalb Central High School's requirements while enabling employers to understand their roles, garner significant buy-in and investment, and allocate the necessary time, space, and resources to create work-based learning programs tailored to their workforce needs and capacity. This approach promotes customization rather than adopting a standardized, one-size-fits-all model.

Although BAM caters specifically to DeKalb Central High School students and manufacturers in DeKalb County, this collaborative approach can and should be replicated at a regional level encompassing four counties and involving employers from diverse industries. Community Foundations and economic development organizations are well-positioned to champion this collaborative effort due to their established presence in the four-county region.

Lisa Deck, from the Purdue IN-MaC program, has developed an effective and collaborative process for guiding communities in creating new work-based learning programs for high school students, and her success in DeKalb County and other communities (and with industries beyond manufacturing) serves as evidence of the efficacy of her approach. Therefore, it is also highly recommended to continue utilizing her process and engagement as work-based learning opportunities evolve in the four counties.

20 Dekalb Central. DeKalb Central Announces Launch of Baron Advanced Manufacturing. <https://www.dekalbcentral.net/apps/news/article/1712033>

21 Purdue University IN-MAC. Indiana Manufacturing Competitiveness Center. <https://www.purdue.edu/in-mac/>

02.

ADDRESS ACCESS GAPS WITHIN THE FOUR COUNTIES BY DEVELOPING REMOTE WORK-BASED LEARNING OPPORTUNITIES.

Expanding access to work-based learning (WBL) opportunities is crucial for fostering the technical ecosystem in the four counties. However, it is essential to acknowledge that not all students have equal access to these traditional WBL options. Students in rural communities, for instance, face limited opportunities due to a scarcity of local employers and intense competition for region-specific industries. Additionally, students lacking reliable personal transportation can only participate in WBL programs aligned with their high school's bus routes, as public transportation infrastructure in these counties is limited. The average distance from one of the high schools to the Impact Institute is 19 miles or an average drive time of 25 minutes.²² While transportation to and from the Impact Institute to take CTE courses does not appear to be a barrier to any student because the sending schools provide bus transportation, it is the lack of transportation to employers from either Impact or the sending schools that creates significant barriers that hinder students' access to a wide range of WBL experiences. To address this issue and promote inclusivity, it is highly recommended that the four counties collaborate to establish and expand remote WBL opportunities.

Prominent employers like Roche Diagnostics in Indianapolis have effectively implemented remote WBL options, including youth apprenticeships. Although these employers are larger and already possess the necessary remote work infrastructure, partnering with them to understand their approach, implementation, and monitoring of remote WBL opportunities would provide invaluable insights for the four counties. Combining this knowledge with the WBL development process developed by Lisa Deck from Purdue's IN-MaC program would be particularly advantageous.

Remote WBL opportunities would not only benefit smaller employers lacking the capacity for in-person WBL but also facilitate collaboration with employers across various industries. Being thrust suddenly into the COVID-19 pandemic, solutions around working remotely were created and implemented and are widely used and available. However, traditional webinars and knowledge-dumping are shown to be less effective than 'learn-by-doing' and 'learn-by-teaching'.²³ Emphasizing the learner's experience will help companies in their efforts to train and upskill employees on a remote platform. Although remote WBL may not be the ideal solution, it would enable students to engage with employers from different counties, expanding both the number of employers connecting with students and the students' acquisition of employability skills essential for success in any career path they choose to pursue.

²² Don Wood Foundation & Inspire Success. 2020-2021 Annual CTE Data Dashboard.

²³ World Economic Forum. How COVID-19 will reshape learning and work. <https://www.weforum.org/agenda/2021/04/future-remote-working-digital-learning-covid-19/>

03.

DEVELOP A REGION-WIDE PROCESS FOR ALLOWING STUDENTS TO UTILIZE CAREER SCHOLARSHIP ACCOUNTS (CSAS) TO PAY FOR CAREER COACHING AND NAVIGATION SERVICES, POSTSECONDARY EDUCATION AND TRAINING, TRANSPORTATION AND EQUIPMENT, AND CERTIFICATION AND CREDENTIALING EXAMINATIONS.

In May 2023, the Indiana legislature passed House Bill 1002, and with it, the creation of “career scholarship accounts” (CSAs) for Indiana’s public and private high school-aged students enrolled in eligible programs²⁴.

For the 2023-2024 school year, high school students enrolled in at least one of the following programs would qualify to use a CSA:

- [Next Level Programs of Study](#) that are aligned to a [Next Level Job](#) and culminate in a credential;
- Modern Youth Apprenticeships, as defined in [IC 20-51.4-2-9.5](#), that are aligned to a Next Level Program of Study;
- U.S. Department of Labor-Registered Apprenticeship Programs, as defined in [IC 20-43-8-0.3](#); and
- [The Indiana College Core \(ICC\) and Level 2 or above Work-Based Learning \(WBL\) experiences](#)²⁵

These CSAs are intended to provide students in grades 10 through 12 with \$5,000 per school year that can be used to pay for costs associated with technical education (e.g., work-based learning opportunities, career and technical training courses that result in an industry-recognized certification, career coaching services, transportation, etc.).²⁶ One caveat to the CSAs is they will also be available to students attending private high schools, thus providing support to help communities connect more students to their local technical education ecosystem.²³ During this same legislative session, Indiana also expanded the school voucher program where roughly 97% of students in Indiana will now qualify for private school subsidies, leading to an anticipated 42,000 additional students utilizing the voucher program by the end of the 2025.²⁷

Indiana’s state budget appropriates \$5 million for CSAs in the 2024 fiscal year and \$10 million in the 2025 fiscal year, with the goal of having 5,000-10,000 students participate.²⁸ Eligible students seeking to utilize a CSA in the 2023-2024 school year need to [fill out an application](#) by October 1st, 2023.

²⁴ Indiana Treasurer of State. <https://www.in.gov/tos/csa/>

²⁵ Indiana Department of Education. Guidance to Support New CSA Opportunity for Students. <https://tpma.sharepoint.com/:b:/s/TPMA/EVHp110PcPNDlp6Cx5eh14cBkF3blLcY9X8xgPpxWzL-94g?e=BiqTff>

²⁶ CSG Midwest. Indiana’s new career scholarship accounts will provide high school students with up to \$5,000 to pursue work-based learning, credentials

²⁷ Chalkbeat Indiana. Indiana is one of several states to expand school vouchers to most students

²⁸ Chalkbeat Indiana. Career Scholarship Accounts will connect Indiana students to employers

HEA 1002-2023 also includes \$5 million in seed money to organizations that will function as intermediaries for the CSAs that would oversee the CSA distribution for their region, provide career coaching services to students, educate parents and students about the CSAs, and connect students to various technical education programs that align with their interests, including connecting students to employers for work-based learning opportunities.

For the 2023-2024 school year, the Commission for Higher Education (CHE) will approve a limited number of intermediaries, with CHE intending to expand the number of approved providers by the 2024-2025 school year. Currently, only the following organizations are eligible to become CSA intermediaries:

- Employers that provide a joint program of Career and Technical Education (CTE);
- Organizations serving as intermediaries for modern youth apprenticeships; and
- Institutions that award the ICC²⁹

The application to become a CSA intermediary for the 2023-2024 school year can be found [here](#).

With more families able to utilize the voucher program to send their children to private schools, career scholarship accounts to help 10th through 12th grade students (public and private) pay for technical education programs outside of their schools CTE courses, and grants to bolster intermediary capacity in communities, it is highly recommended that qualifying organizations in the 4-county region apply for the CSA intermediary funding and use it to develop a process for educating employers, schools, students, and parents/guardians on their CSA options, and to bring these students into the already robust technical education ecosystem.

It is important to note that if a student at a public high school chooses to utilize their CSA, their high school will no longer receive Form 30A CTE funding for that student because the money in their CSA comes from the same funding stream as the Form 30A funding. However, schools will be able to bill the student's CSA up to the amount of Form 30A funding they expected to receive for that student to help cover the costs associated with the CTE courses the student is taking at their high school. CTE Centers (such as the Impact Institute) can do the same – bill the student's CSA for up to the amount of tuition they would have charged the student's sending school.

29 Indiana Department of Education. Guidance to Support New CSA Opportunity for Students. <https://tpma.sharepoint.com/:b:/s/TPMA/EVHp110PcPNDlp6Cx5eh14cBkF3bILcY9X8xgPpxWzL-94g?e=BiqTff>

04.

PROVIDE A SKILL-BASED APPROACH TO CAREER ADVISING TO HIGH SCHOOL STUDENTS.

Because of graduation requirements, number of licensed CTE teachers, school schedules, student interest, and a variety of other issues, schools in the 4-county region are continuing to enroll students into “low” and “moderate” demand CTE pathways. There is no data, including stakeholder engagement data, to indicate this will change in the next several school years. In fact, it is highly likely the number of students in CTE pathways that do not align with the labor market needs of the 4-county region will increase over the next several years as schools use CTE concentrators as the graduation pathway for more students, needing to place them in whatever classes have open seats and align with the students’ scheduling needs.

Instead of the region’s employers and community leaders fighting against this changing tide of CTE enrollment in the local high schools, it is highly recommended that the region swim with the current by developing and adopting a “transferable skill” or reskilling approach to career advising and employer engagement. This nonlinear approach to technical education would help students understand the versatile skill set they developed in their CTE classes (no matter the pathways) that can be applied across various industries, enhancing their employability in high-demand careers. It will also increase employer touchpoints with students by bringing them into the “low” and “moderate” demands classes to discuss how that versatile set of transferable skills could help them succeed in jobs in the employer’s industry and could serve to help employers recruit students outside of the traditional, linear CTE pathway.

Career advisors, including guidance counselors, CTE directors, and CSA intermediaries, should work together with industry leaders and employers to help students identify the transferable skills they have acquired through their programs of study and understand how these skills can be applied in different industries. This shift from traditional career advising, which often follows a linear career path, to a dynamic, skill-based approach will better prepare students for a diverse range of career opportunities.

This remains true as employers are finding that the shift in hiring efforts from pedigree-based hiring to one of skill-based attracts and retains a broader pool of talent.³⁰ With employers like Boeing, Walmart, and IBM pledging to and transitioning toward skills-based hiring, it is imperative that career advisors include this model in conversations with students. Tools such as the Job Progression Tool and Skill Profile Builder³¹ created by the Rework America Alliance will help guide career advisors and students in their career exploration.

To capitalize on this shift, leaders in the region should also reimagine the connection between students and employers. For instance, employers can engage in classroom discussions or collaborate on projects with students in “low” demand programs of study, offering students direct feedback and valuable insights into the industry, serving as a unique and innovative recruitment opportunity. For this to be successful, however, resources and guidance will need to be developed to help employers understand how to talk about transferable skills and why spending time in a classroom outside of their industry’s pathway is needed and appropriate.

30 McKinsey & Company. Taking a skills-based approach to building the future workforce. <https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/taking-a-skills-based-approach-to-building-the-future-workforce>

31 Rework America Alliance. Skill Profile Builder. <https://builder.skillsengine.com/>

05.

ADDRESS GENERATIONAL GAPS BY CONSISTENTLY AND INTENTIONALLY INCLUDING HIGH SCHOOL STUDENTS IN COMMUNITY- AND REGION-BASED CONVERSATIONS AROUND TECHNICAL EDUCATION AND WORKFORCE DEVELOPMENT.

The generational gap between educators, employers, and students can often lead to misunderstandings and missed opportunities. The information gathered from stakeholder interactions reveals a current absence of initiatives to incorporate high school students in the ongoing collaborative dialogues and advisory committees focused on technical education and the development of a skilled workforce in the region. The prevailing exclusion of student perspectives in these assemblies—with no apparent plans for future inclusion—may unintentionally exacerbate generational disparities. This can occur through the establishment and execution of programs and opportunities that align with the anticipations of older generations, neglecting the needs and preferences of the intended student beneficiaries.

To bridge this gap, it is recommended that community and workforce leaders in the 4-county region involve high school students in the conversations and decisions surrounding technical education and workforce development. This inclusion is not just about listening to students' voices; it's about integrating their unique perspectives and insights into the very fabric of Career and Technical Education (CTE) programs, which could likely mean asking employers and workforce leaders to rethink their understanding of and approach to technical education and employment.

High school students are the primary beneficiaries of CTE programs, and as such, they possess firsthand experience and knowledge that can significantly contribute to the improvement and evolution of these programs. They can provide valuable feedback on the presentation and marketing of CTE programs, helping to identify ways to make these programs more appealing and relevant to their peers. This could involve rethinking the language used to describe programs, the platforms used for communication, or the types of experiences and outcomes highlighted.

Moreover, students can provide unique insights into their generation's attitudes toward work and careers. As noted in the Vox article titled "Gen Z does not dream of labor", there is a growing trend among young people, particularly Gen Z and young millennials, to prioritize personal fulfillment and work-life balance over traditional work ethics.³² This shift in mindset has implications for how communities prepare students for the workforce and how employers engage and recruit young talent. By including students in these conversations, communities can better align CTE programs with the values and expectations of the emerging workforce.

Furthermore, students can play a critical role in helping employers understand the changing dynamics of the labor market. They can shed light on the factors influencing the "Great Resignation", where workers, especially younger ones, are leaving their jobs due to dissatisfaction, burnout, or a desire for better conditions. They can also share their experiences and aspirations related to non-traditional work paths, such as full-time content creation or freelancing, which are becoming increasingly popular among their generation.

To address generational gaps and ensure the continued relevance and effectiveness of CTE programs, it is essential to include high school students consistently and intentionally in community- and region-based conversations around technical education and workforce development. This approach will not only enrich these conversations with diverse perspectives but also empower students as active stakeholders in their education and career paths.

³² Vox. Gen Z does not dream of labor. <https://www.vox.com/the-highlight/22977663/gen-z-antiwork-capitalism>

06.

DEVELOP COMMON DEFINITIONS OF CTE TERMINOLOGY. CLEAR AND CONSISTENT COMMUNICATION IS KEY TO THE SUCCESS OF ANY INITIATIVE.

In the context of CTE, this means using consistent terminology across all stakeholders. This could involve developing a glossary of terms and definitions related to CTE, which can be shared among schools, employers, and community organizations. This will ensure that everyone is speaking the same language and that there is a common understanding of what different terms and concepts mean. Below are a few examples of CTE terminology that can have different meanings to different stakeholders, and some suggested definitions.

- **Career and Technical Education (CTE):** An education pathway that provides students with the academic, technical, and real-world knowledge, skills and experience they need to be prepared for a variety of career options.³³
- **CTE Concentrator:** A student who completes at least two advanced courses in a single Career and Technical Education program or program of study³⁴.
- **CTE Pathways:** A coherent, planned sequence of career technical education courses detailing the knowledge and technical skills students need to succeed in a specific career area.³⁵
- **Programs of Study:** A planned sequence of courses that integrates rigorous academic knowledge with technical skills and knowledge to provide secondary CTE students with a bridge to postsecondary education and career pathways.³⁶
- **High-Quality Work-Based Learning (HQWBL):** School-coordinated workplace experiences related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.³⁷
- **Industry Tours:** A highly structured Career Awareness activity in which students visit a workplace, learn about the business, meet employees, ask questions, and observe work in progress. An industry tour should involve preparation and follow-up in the classroom, including research and reflection by students.³⁸
- **Job Shadowing:** Places students in workplaces, either in person or virtually, to interact with employees for more in-depth exposure to both careers and workplaces. Student job shadowing may be in person, virtual, a one-on-one interaction, or a group experience.³⁹

33 Department of Defense Education Activity. <https://www.dodea.edu/curriculum/careerteched/index.cfm#:~:text=What%20is%20CTE%3Fa%20variety%20of%20career%20options>

34 Indiana Office of Career and Technical Education. NLPs Frequently Asked Questions. https://www.in.gov/gwc/cte/files/NLPS-FAQ_4.1.22.pdf

35 Maine Department of Education. CTE Glossary of Terms. https://www.maine.gov/doe/sites/maine.gov/doe/files/inline-files/CTEglossary_201709.pdf

36 Maine Department of Education. CTE Glossary of Terms. https://www.maine.gov/doe/sites/maine.gov/doe/files/inline-files/CTEglossary_201709.pdf

37 Henrico Workforce & Career Development. What is High-Quality Work-Based Learning? <https://henricocte.com/what-is-high-quality-work-based-learning/>

38 NYC Department of Education. Workplace Tour Fact Sheet. <http://wbltoolkit.cte.nyc/workplace-tour/>

39 Hanover County Public Schools. High-Quality Work-Based Learning Guide. https://hcps.us/parents_students/program_of_studies/high-quality_work-based_learning

07.

DEVELOP COMMON CTE CURRICULUM MAPS AND PACING GUIDES SO PROGRAMS DO NOT LEAVE WITH AN INSTRUCTOR.

A consistent curriculum is key to the sustainability of CTE programs. This means developing curriculum resources that can be used by any teacher at any school (including the Impact Institute), not just the one who originally developed the course. These resources could include lesson plans, pacing guides, and assessment tools, all aligned with industry standards and requirements. By working with industry leaders, teachers can ensure that the curriculum reflects current industry practices and prepares students for the workforce. These resources should be shared among all schools in the region, promoting consistency and collaboration across the CTE ecosystem.⁷⁴

